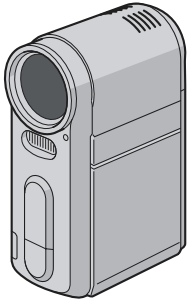
JVC

ENGLISH

DIGITAL MEDIA CAMERA

GZ-MC100



MASCOT CAPSULE

SD

DOLBY DIGITAL

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To deactivate the demonstration, set "DEMO MODE" to "OFF". (☞ pg. 26)

For Customer Use:
Enter below the Model No. and Serial No. which is located on the battery pack mount of the camera. Retain this information for future reference.

Model No.

Serial No.

INSTRUCTIONS

This instruction manual describes the basic operations of the camera. For more information, read the advanced operation manual provided as HTML format in the CD-ROM. See page 32 for details.

LYT1337-001A

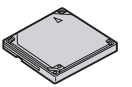
EN

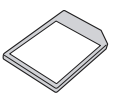
Major Features of this Camera

Removable hard disk

In contrast to conventional digital video cameras that record to DV tapes, the removable hard disk is a new type of card media that enables extended hours of high-resolution, MPEG2 video recording. (☞ pg. 5)

Various Recording Media and Modes

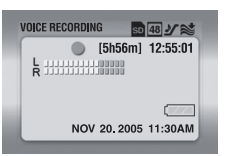




Video and still images can be recorded to CompactFlash card (CF card) and SD memory card. The removable hard disk (provided) or Microdrive is a type of CF card compliant with CF+ Type II.
You can select the most suitable recording medium and mode for picture quality, image size, recording time, and computer environment. (☞ pg. 42)

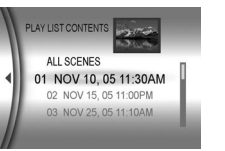
Voice Recording Features

The camera can be used as a voice recorder for audio recordings. (☞ pg. 24)



Enjoying Various Playback Features

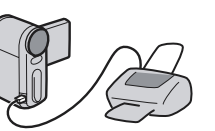
Unlike tape operation, playback is simple and easy in this camera since no time is needed for rewinding or fast forward operations.
Playlist, playback effects, and other functions are also available for enjoying many different types of playback. (Refer to the advanced operation manual in CD-ROM. ☞ pg. 32)



Editing Files on your PC

USB 2.0 enables the smooth transfer of video and still images to a computer. With the bundled Cyberlink software, you can easily edit video and create your own DVDs. (Refer to “SOFTWARE INSTALLATION AND USB CONNECTION GUIDE”.)

Direct Printing



If your printer is compatible with PictBridge, still images can be printed easily by connecting the camera with USB cable directly to the printer. (Refer to the advanced operation manual in CD-ROM. ☞ pg. 32)

Dear Customer,
Thank you for purchasing this digital media camera. Before use, please read the safety information and precautions contained in the pages 3 – 4 to ensure safe use of this product.

SAFETY PRECAUTIONS

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTIONS:
- This camera is designed to be used with NTSC-type color television signals. It cannot be used for playback with a television of a different standard. However, live recording and LCD monitor playback are possible anywhere.
- Use the JVC BN-VM200U battery pack and, to recharge it or to supply power to the camera from an AC outlet, use the provided multi-voltage AC adapter. (An appropriate conversion adapter may be necessary to accommodate different designs of AC outlets in different countries.)

NOTES:
- The rating plate (serial number plate) and safety caution are on the battery pack mount of the main unit.
- The rating information and safety caution of the AC adapter are on its upper and lower sides.

This product has a fluorescent lamp that contains a small amount of mercury. Disposal of these materials may be regulated in your community due to environmental considerations.
For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: **<http://www.eiae.org>**

When the equipment is installed in a cabinet or on a shelf, make sure that it has sufficient space on all sides to allow for ventilation (10 cm (3-15/16") or more on both sides, on top and at the rear).

Do not block the ventilation holes.
(If the ventilation holes are blocked by a newspaper, or cloth etc. the heat may not be able to get out.)

No naked flame sources, such as lighted candles, should be placed on the apparatus.

When discarding batteries, environmental problems must be considered and the local rules or laws governing the disposal of these batteries must be followed strictly.

The apparatus shall not be exposed to dripping or splashing.

Do not use this equipment in a bathroom or places with water.
Also do not place any containers filled with water or liquids (such as cosmetics or medicines, flower vases, potted plants, cups etc.) on top of this unit.
(If water or liquid is allowed to enter this equipment, fire or electric shock may be caused.)

Do not point the lens directly into the sun. This can cause eye injuries, as well as lead to the malfunctioning of internal circuitry. There is also a risk of fire or electric shock.

CAUTION!

The following notes concern possible physical damage to the camera and to the user.

Carrying or holding the camera by the LCD monitor can result in dropping the unit, or in a malfunction.

Do not use a tripod on unsteady or unlevel surfaces. It could tip over, causing serious damage to the camera.

CAUTION!

Connecting cables (Audio/Video, S-Video, etc.) to the camera and leaving it on top of the TV is not recommended, as tripping on the cables will cause the camera to fall, resulting in damage.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.

11. Unplug this apparatus during lightning storms or when unused for long periods of time.
12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Before Using this Camera

This camera is designed exclusively for CompactFlash Card (CF card) and SD Memory Card.

The removable hard disk (provided) or Microdrive is a type of CF card compliant with CF+ Type II.

This camera records video in MPEG2 format compliant with SD-VIDEO format.

Remember that this camera is not compatible with other digital video formats.

Remember that this camera is intended for private consumer use only.
Any commercial use without proper permission is prohibited. (Even if you record an event such as a show, performance or exhibition for personal enjoyment, it is strongly recommended that you obtain permission beforehand.)

Before recording important video, be sure to make a trial recording.
Play back your trial recording to make sure the video and audio have been recorded properly.

Also read “Cautions” on pages 37 to 39.

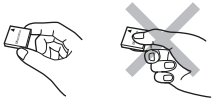
- Manufactured under licence from Dolby Laboratories. “Dolby” and double-D symbol are trademarks of Dolby Laboratories.
- Microdrive® is a registered trademark of Hitachi Global Storage Technologies, Inc. in the United States and/or other countries.
- MASCOT CAPSULE
  MascotCapsule is registered trademark of HI CORPORATION in Japan.
  Copyright © 2001 HI CORPORATION. All rights reserved.
- Other product and company names included in this instruction manual are trademarks and/or registered trademarks of their respective holders.

Removable Hard Disk

The removable hard disk is a precision electronic device. Be careful when handling it.

Cautions for external jolt or stress

- After removing the disk from the camera, store it by inserting into the supplied protective case.
- Do not press on the cover.
- Do not subject the disk to vibrations or sudden jolts. Be especially careful to avoid sudden jolts when shooting or during playback.



- Do not affix stickers or write on the label.
- Do not apply strong pressure to the outside of the disk. Also, do not put it in your pants pocket or other location where it can be pressed on.

Cautions for temperature

- The camera’s protection circuit may work for the proper recording or playback when the camera’s internal temperature rises or during usage in a cold location. (☞ pg. 36)
- The camera and removable hard disk can heat up when used for an extended period. However, this is not a malfunction.
- The disk can heat up when used for an extended period. Therefore, do not remove it immediately from the camera.

Other cautions

- Condensation can cause the drive to break down. If water is splashed on the drive, make sure that it is completely dried before usage.
- Do not use, replace, or store the disk in locations that are exposed to strong static electricity or electrical noise.
- Do not turn off the camera power or remove the battery or AC adapter during shooting, playback, or when otherwise accessing the recording medium.
- Do not bring the recording medium near objects that have a strong magnetic field or that emit strong electromagnetic waves.
- Since data must be read and written by the drive correctly, the camera may be unable to shoot when the camera heats up, such as during continuous shooting, or when the camera is cooled down during usage in a cold location. To fix this problem, follow the messages displayed on the screen. (☞ pg. 36)
- To maintain high performance, perform check disks (error checks) using your computer on a regular basis. Use a USB cable to connect the camera and PC, and then perform the check disk on the removable hard disk using the same procedure as a regular local disk (C drive). Refer to the instruction manual of your PC for check disks.
- Clean up the disk regularly to maintain high performance. (☞ pg. 27)

Also read “Recording Medium” on page 38.

Be careful to completely delete data when discarding or giving away the removable hard disk.

When recording data is formatted or deleted on the camera, this only modifies the file management information, and the data is not completely erased. When discarding or giving away the removable hard disk, to prevent problems caused by the release of sensitive information, it is extremely important that the customer take responsibility to erase all recorded data. Some recommended methods of erasing data include using a commercial data removal program or using a hammer or strong magnet to physically or magnetically destroy the data on the hard disk so that it cannot be read. JVC shall not be responsible for any personal data that is released.

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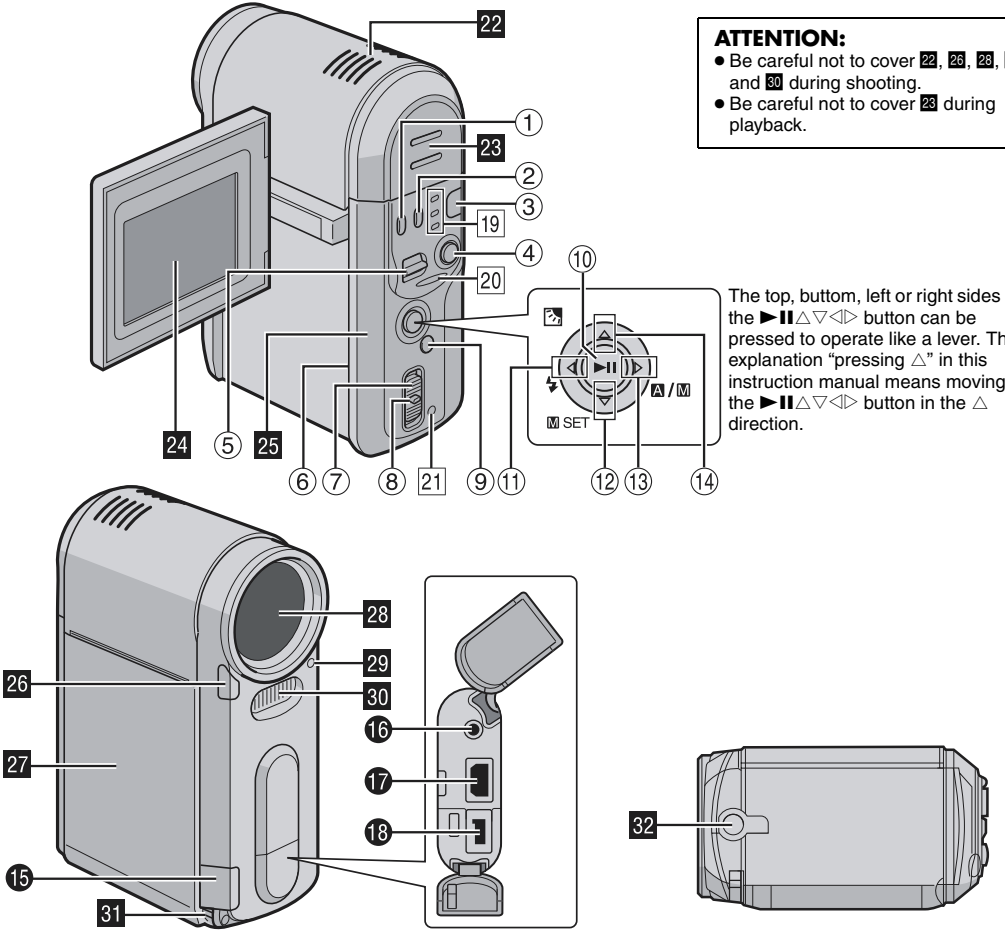


ATTENTION:
- Be careful not to cover 22, 26, 28, 29 and 30 during shooting.
- Be careful not to cover 23 during playback.

The top, buttom, left or right sides of the ►II△▽◁▷ button can be pressed to operate like a lever. The explanation "pressing △" in this instruction manual means moving the ►II△▽◁▷ button in the △ direction.

Controls

① Delete Button [🗑] (☞ pg. 21, 23, 24)
② Information Button [INFO] (Used to display the file information. Refer to the advanced operation manual. ☞ pg. 32)
③ Mode Button [MODE] (☞ pg. 19)
④ Recording Start/Stop Button (☞ pg. 20)
⑤ Zoom Lever [T/W] (☞ pg. 20)
Speaker Volume Control (☞ pg. 21)
⑥ Rear Panel Open Switch [OPEN] (☞ pg. 16)
⑦ Power Switch [OFF, ●, ▶] (☞ pg. 19)
⑧ Lock Button (☞ pg. 19)
⑨ Menu Button [MENU] (☞ pg. 26)
⑩ Play/Pause Button [▶II] (☞ pg. 21)
⑪ Reverse Search Button [◁ (◀◀)] (☞ pg. 21)
Left Button [◁] (☞ pg. 26)
Flash Button [ϟ] (Used to change the flash mode. Refer to the advanced operation manual. ☞ pg. 32)
⑫ Forward Skip Button [▽ (▶▶I)] (☞ pg. 21)
Down Button [▽] (☞ pg. 26)
Manual Set Button [M SET] (☞ pg. 31)
⑬ Forward Search Button [▷ (▶▶)] (☞ pg. 21)
Right Button [▷] (☞ pg. 26)
Auto/Manual Mode Switch [A/M] (☞ pg. 19)
⑭ Reverse Skip Button [△ (I◀◀)] (☞ pg. 21)
Up Button [△] (☞ pg. 26)
Backlight Compensation Button [] (Used to engage backlight compensation. Refer to the advanced operation manual. ☞ pg. 32)

Connectors

The connectors are located beneath the covers.
⑮ USB (Universal Serial Bus) Connector (Refer to the software installation and USB connection guide.)
⑯ Headphone connector [] (☞ pg. 13)
⑰ S-Video/Audio/Video Output Connector [AV] (☞ pg. 25)
⑱ DC Input Connector [DC] (☞ pg. 14)

Indicators

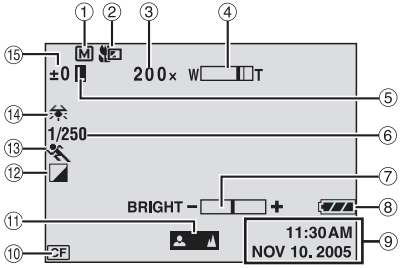
19 Mode Lamp [🎥 (video), 📷 (still image), 🎙 (voice)] (☞ pg. 19)
20 Access Lamp (Lights up or blinks when you access to any files. Do not turn off the power or remove the battery pack/AC adapter while accessing to files during recording or playback.)
21 Power/Charge Lamp (☞ pg. 14, 19)

Other Parts

22 Stereo Microphone
23 Speaker (☞ pg. 21)
24 LCD Monitor (☞ pg. 18)
25 Rear Panel (Recording media cover) (☞ pg. 16)
26 Camera Sensor
27 Battery Cover (☞ pg. 14)
28 Lens
29 Flash Sensor
30 Flash
31 Hand Strap Eyelet (☞ pg. 12)
32 Tripod Mounting Socket

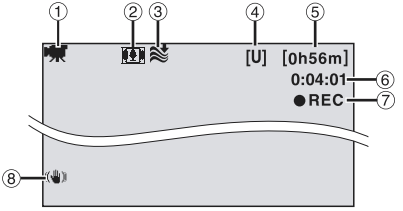
Indications on LCD Monitor

During both Video and Still Image Recording



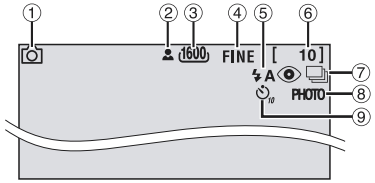
① Manual Mode Indicator (☞ pg. 19)
② Tele Macro Mode Indicator (☞ pg. 28)
③ Approximate Zoom Ratio (☞ pg. 20, 28)
④ Zoom Indicator (☞ pg. 20, 28)
⑤ Iris Lock Indicator (Appears when iris is locked. Refer to the advanced operation manual. ☞ pg. 32)
⑥ Shutter Speed (☞ pg. 31)
⑦ Brightness Control Indicator (☞ pg. 27)
⑧ Battery Indicator
⑨ Date/Time (☞ pg. 27)
⑩ Selected Medium Indicator (☞ pg. 17, 27)
⑪ Manual Focus Adjustment Indicator (☞ pg. 31)
⑫ Effect Mode Indicator (☞ pg. 31)
⑬ Program AE Mode Indicator (☞ pg. 31)
⑭ White Balance Indicator (☞ pg. 31)
⑮ ±: Exposure Adjustment Indicator (☞ pg. 31)
: Backlight Compensation Indicator (Appears when backlight compensation is engaged. Refer to the advanced operation manual. ☞ pg. 32)
: Spot Exposure Control Indicator (Appears when spot exposure control is engaged. Refer to the advanced operation manual. ☞ pg. 32)

During Video Recording only



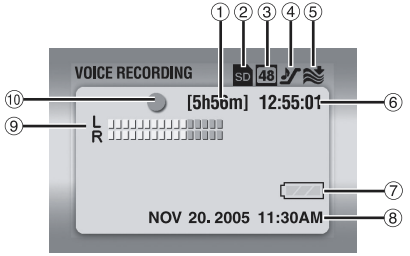
① Mode Indicator (☞ pg. 19)
② Wide Mode Indicator (☞ pg. 28)
③ Wind Cut Indicator (☞ pg. 28)
④ Picture Quality: [U] (ultra fine), [F] (fine), [N] (normal), [E] (economy) (☞ pg. 28)
⑤ Remaining Time (☞ pg. 20, 42)
⑥ Counter (☞ pg. 27)
⑦ ●REC: (Appears during recording.) (☞ pg. 20)
●❚❚: (Appears during record-standby mode.) (☞ pg. 20)
⑧ Digital Image Stabilizer (DIS) (☞ pg. 28)

During Still Image Recording only



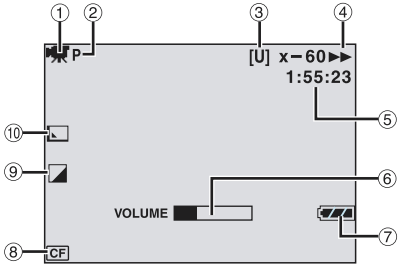
① Mode Indicator (☞ pg. 19)
② 👤: Focus Icon (☞ pg. 22)
③ Image Size: 1600 (1600 x 1200), 1280 (1280 x 960), 1024 (1024 x 768), 640 (640 x 480) (☞ pg. 29)
④ Picture Quality: FINE (fine) and STANDARD (standard) (☞ pg. 29)
⑤ Flash Indicator (Appears when flash mode is engaged. Refer to the advanced operation manual. ☞ pg. 32)
⑥ Remaining Number Of Shots (☞ pg. 42)
⑦ Continuous Shooting Mode (☞ pg. 22)
⑧ Shooting Icon (☞ pg. 22)
(Appears during shooting.)
⑨ Self-Timer Recording Indicator (☞ pg. 29)

During Voice Recording



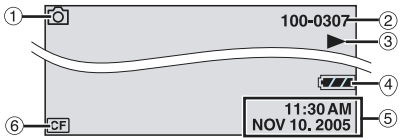
① Remaining Time (☞ pg. 43)
② Selected Medium Indicator (☞ pg. 17, 27)
③ Sound Quality: 48 (fine), 16 (standard), 8 (economy) (☞ pg. 30)
④ Recording Level: (high), (middle), (low) (☞ pg. 30)
⑤ Wind Cut Indicator (☞ pg. 28)
⑥ Counter
⑦ Battery Indicator
⑧ Date/Time (☞ pg. 27)
⑨ Microphone Input Level Indicator
⑩ Recording Mode
●: Record
●: Record-standby

During Video Playback



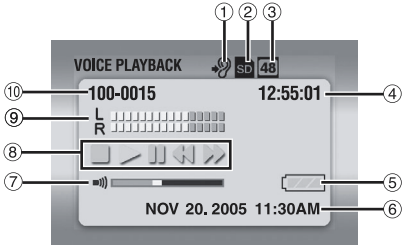
① Mode Indicator (☞ pg. 19)
② Play List Playback Indicator (Appears when play list is played back. Refer to the advanced operation manual. ☞ pg. 32)
③ Picture Quality: [U] (ultra fine), [F] (fine), [N] (normal), [E] (economy) (☞ pg. 28)
④ Playback Mode (☞ pg. 21)
▶ : Playback
❚❚ : Pause
▶▶ : Forward High-Speed Search
◀◀ : Reverse High-Speed Search
❚❚▶ : Forward Slow-Motion
◀❚❚ : Reverse Slow-Motion
(The number on the left shows speed.)
⑤ Counter (☞ pg. 27)
⑥ Volume Level Indicator
⑦ Battery Indicator
⑧ Selected Medium Indicator (☞ pg. 17, 27)
⑨ Effect Mode Indicator (☞ pg. 31)
⑩ Wipe/Fader Effect Indicator (☞ pg. 29)

During Still Image Playback



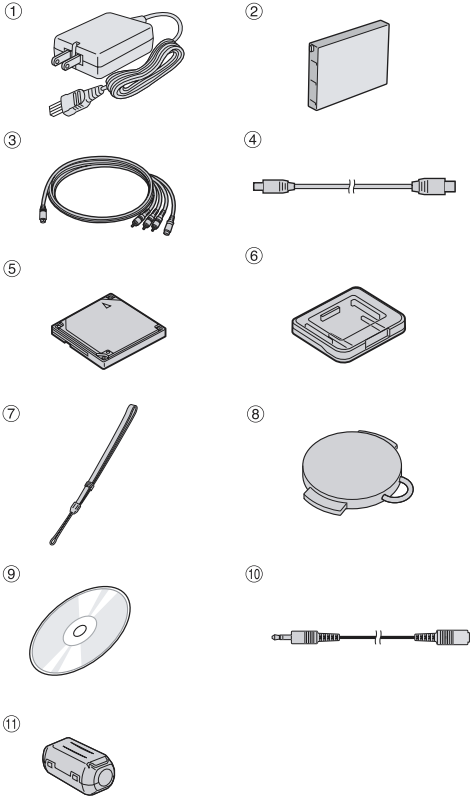
① Mode Indicator (☞ pg. 19)
② Folder/File Number
③ ▶ : Slide Show (☞ pg. 23)
④ Battery Indicator
⑤ Date/Time (☞ pg. 27)
⑥ Selected Medium Indicator (☞ pg. 17, 27)

During Voice Playback



① Playback Speed: (normal), (fast), (slow) (☞ pg. 30)
② Selected Medium Indicator (☞ pg. 17, 27)
③ Sound Quality: 48 (fine), 16 (standard), 8 (economy) (☞ pg. 30)
④ Counter
⑤ Battery Indicator
⑥ Date/Time (☞ pg. 27)
⑦ Volume Level Indicator
⑧ Playback Mode (☞ pg. 24)
▶ : Playback
▶▶ : Forward High-Speed Search
◀◀ : Reverse High-Speed Search
❚❚ : Pause
■ : Stop
⑨ Recording Level Indicator
⑩ Folder/File Number

Provided Accessories



① AC Adapter AP-V14U
② Battery Pack BN-VM200U
③ S-Video/Audio/Video Cable
④ USB Cable
⑤ Removable Hard Disk (4 GB)
⑥ Protective Case for Removable Hard Disk
⑦ Hand Strap (See page 12 for attachment)
⑧ Lens Cap (See page 12 for attachment)
⑨ CD-ROM
⑩ Audio Extension Cable (for optional headphone, see page 13 for attachment)
⑪ Core Filter for cables (See page 13 for attachment)
Large: S-Video/Audio/Video Cable
Medium: USB cable
Small: audio extension cable and AC adapter's cord

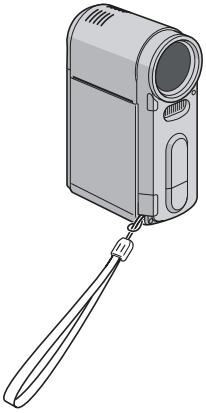
NOTES:

- In order to maintain optimum performance of the camera, provided cables may be equipped with one or more core filter. If a cable has only one core filter, the end that is closest to the filter should be connected to the camera.
- Make sure to use the provided cables for connections. Do not use any other cables.

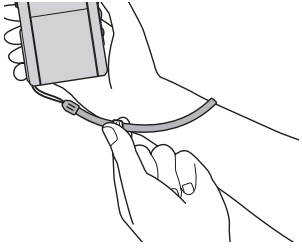
Attaching the Hand Strap

1 Thread the end of the strap through the eyelet.

2 Pass the other end through the loop.



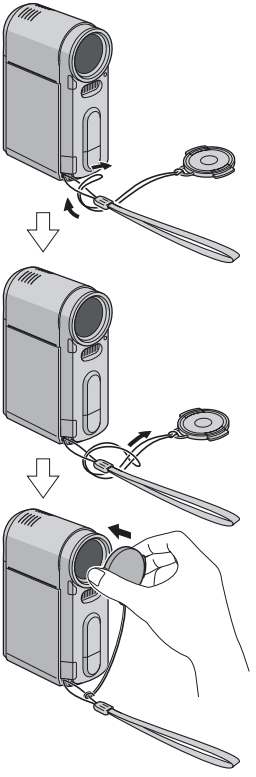
NOTE:
When carrying the camera, pass your arm through the strap to prevent dropping the camera. Tighten the strap at your wrist by sliding the buckle.



Attaching the Lens Cap

To protect the lens, attach the provided lens cap to the camera as shown in the illustration.

NOTE:
To confirm the lens cap is on correctly make sure the cap is flush to the camera.



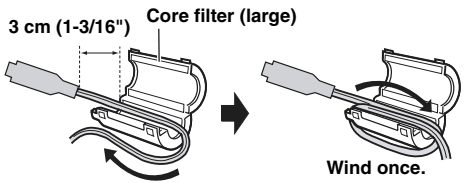
Attaching the Core Filter

Attach the core filters to the cables. The core filter reduces interference.

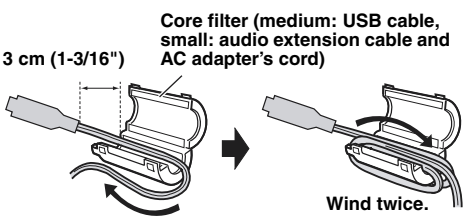
1 Release the stoppers on both ends of the core filter.

2 Run the cable through the core filter, leaving approx. 3 cm of cable between the cable plug and the core filter.

S-Video/Audio/Video cable
Wind the cable once around the outside of the core filter as shown in the illustration.



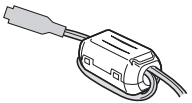
USB cable, audio extension cable and AC adapter's cord
Wind the cable twice around the outside of the core filter as shown in the illustration.



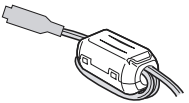
- Wind the cable so that it is not slack.

3 Close the core filter until it clicks shut.

S-Video/Audio/Video cable



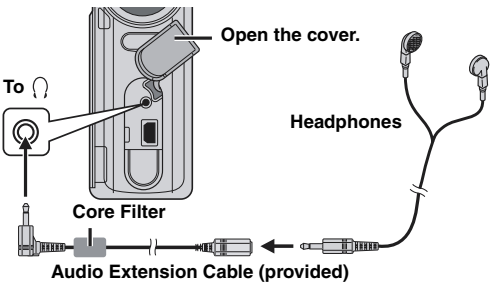
USB cable, audio extension cable and AC adapter's cord



NOTES:
- Take care not to damage the cable.
- When connecting a cable, attach the end with the core filter to the camera.

How to Use the Audio Extension Cable

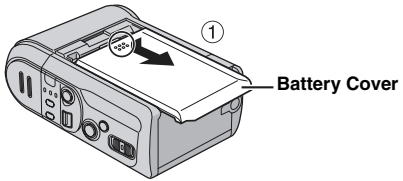
When using optional headphones, connect to the provided audio extension cable (with a core filter attached), then connect the audio extension cable to the camera. The core filter reduces interference.

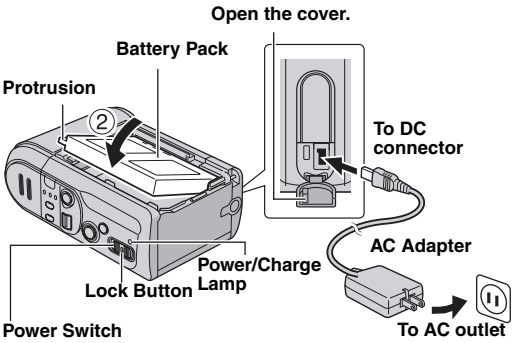


Power

This camera's 2-way power supply system lets you choose the most appropriate source of power. Do not use provided power supply units with other equipment.

Charging the Battery Pack





1 Set the power switch to **OFF** while pressing down the lock button located on the switch.

2 Slide and remove the battery cover ① by hooking on the ○ part with your finger.

3 Insert the battery pack firmly into the battery pack mount until it locks into space in the direction of the arrow ②.

4 Close the battery cover firmly until it locks.

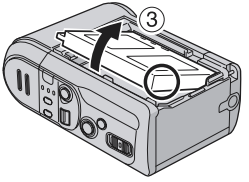
5 Connect the AC adapter to the camera.

6 Plug the AC adapter into an AC outlet. The power/charge lamp on the camera blinks to indicate charging has started.

7 When the power/charge lamp goes out, charging is finished. Unplug the AC adapter from the AC outlet. Disconnect the AC adapter from the camera.

To detach the battery pack

Open the battery cover, and remove the battery pack in the direction of the arrow ③ by holding the ○ part.



Battery pack	Charging time
BN-VM200U (provided)	Approx. 1 hr. 35 min.

NOTES:
- It is recommended that only genuine JVC batteries are used in this camera. Using generic non-JVC batteries can cause damage to the internal charging circuitry.
- If the protective cap is attached to the battery pack, remove it first.
- When charging the battery pack for the first time or after a long storage period, the power/charge lamp may not light. In this case, remove the battery pack from the camera, then try charging again.
- If the battery operation time remains extremely short even after having been fully charged, the battery is worn out and needs to be replaced. Please purchase a new one.
- Since the AC adapter processes electricity internally, it becomes warm during use. Be sure to use it only in well-ventilated areas.

Using the Battery Pack

Perform steps **2** – **4** in "Charging the Battery Pack".

Maximum continuous recording time

Battery pack	Recording time
BN-VM200U (provided)	1 hr. 5 min.

NOTES:
- Recording time is reduced significantly under the following conditions:
  - Zoom or record-standby mode is engaged repeatedly.
  - Playback mode is engaged repeatedly.
- Before extended use, it is recommended that you prepare enough battery packs to cover 3 times the planned recording time.

Using AC Power

Connect the AC adapter to the camera as shown in the illustration. (☞ pg. 14)

NOTE:
The provided AC adapter features automatic voltage selection in the AC range from 110 V to 240 V.

ATTENTION:
- Before detaching the power source, make sure that the camera's power is turned off. Failure to do so can result in a camera malfunction.
- If a malfunction occurs by electrostatic discharge, the power source should be terminated to reset the device.

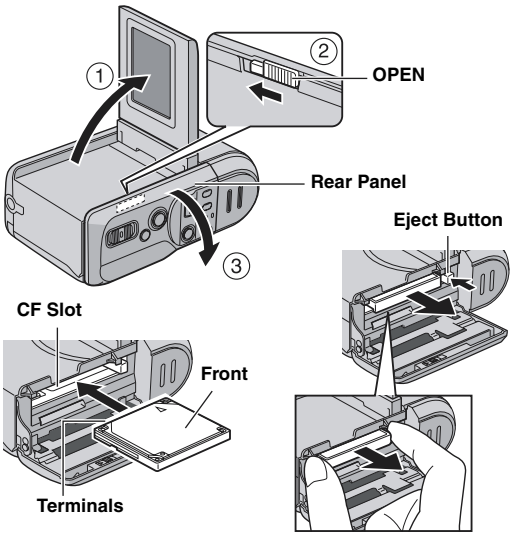
About Batteries

DANGER! Do not attempt to take the batteries apart, or expose them to flame or excessive heat, as it may cause a fire or explosion.
WARNING! Do not allow the battery or its terminals to come in contact with metals, as this can result in a short circuit and possibly start a fire.

The Benefits Of Lithium-Ion Batteries
Lithium-ion battery packs are small but have a large power capacity. However, when one is exposed to cold temperatures (below 10°C/50°F), its usage time becomes shorter and it may cease to function. If this happens, place the battery pack in your pocket or other warm, protected place for a short time, then re-attach it to the camera.

Inserting/Removing a CF Card

You can use a CF card (CompactFlash card) as a recording medium in the CF slot.
The removable hard disk (provided) or Microdrive is a type of CF cards. See page 42 for the recommended media.



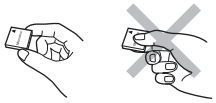
1 Make sure the camera's power is off.
2 Open the LCD monitor fully. (☞ pg. 18)
3 Slide and hold **OPEN** in the direction of the arrow ②, then open the rear panel.
4 When the eject button is pulled out as shown in the illustration, push it once.
- The button is pushed in.

5 **To insert a CF card,** firmly insert it as shown in the illustration.
To remove a CF card, push the eject button twice.
- The eject button comes out by pushing it once. By pushing the eject button once again ejects the CF card.

6 Close the rear panel firmly until it locks.

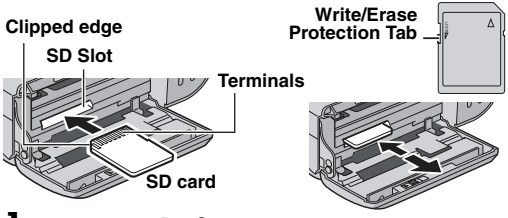
NOTES:
- Read the cautions on CF card. (☞ pg. 38, "Recording Medium")
- Before using a new CF card, it is necessary to format the CF card. (☞ pg. 27)

ATTENTION:
- Do not insert or remove the CF card while the camera is turned on, as this may cause the CF card to be corrupted or cause the camera to become unable to recognize whether or not the CF card is installed.
- Do not squeeze the external covers of the CF card.



Inserting/Removing an SD Card

You can use an SD card as a recording medium in the SD slot. See page 42 for the recommended media.



1 Perform steps **1** – **3** in "Inserting/Removing a CF Card".

2 **To insert a SD card**, firmly insert it with its clipped edge first.
To remove a SD card, push it once. After the SD card comes out of the camera, pull it out.
● Do not touch the terminal on the reverse side of the label.

3 Close the rear panel firmly until it locks.

To protect valuable files
Slide the write/erase protection tab on the side of the SD card in the direction of “LOCK”. This prevents the SD card from being recorded over. To record on this SD card, slide the tab back to the position opposite to “LOCK” before inserting it.

NOTE:
Before using a new SD card, it is necessary to format the card. (☞ pg. 26, 27)

ATTENTION:
Do not insert or remove the SD card while the camera is turned on, as this may cause the SD card to be corrupted or cause the camera to become unable to recognize whether or not the SD card is installed.

Selecting Recording Medium

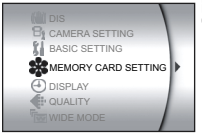
Select the recording medium before starting recording or playback.
Example: When recording still images to a CF card

1 Open the LCD monitor fully. (☞ pg. 18)

2 Set the power switch to ● or ► while pressing down the lock button located on the switch.

3 Press **MENU**. The menu screen appears.

4 Press △▽ to select [MEMORY CARD SETTING], and press ►II.



5 Press △▽ to select [IMAGE MODE], and press ►II.

6 Press △▽ to select [CF SLOT], and press ►II.

7 Press **MENU** to return to the normal screen.

Date/Time Settings

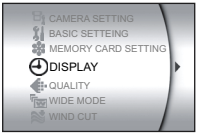
The date/time is recorded on the picture at all times, but its display can be turned on or off during playback.
(☞ pg. 26, 27)

1 Open the LCD monitor fully.

2 Set the power switch to ● or ► while pressing down the lock button located on the switch.

3 Press **MENU**. The menu screen appears.

4 Press △▽ to select [DISPLAY], and press ►II. The sub menu appears.



5 Press △▽ to select [CLOCK ADJUST], and press ►II. The month is highlighted.

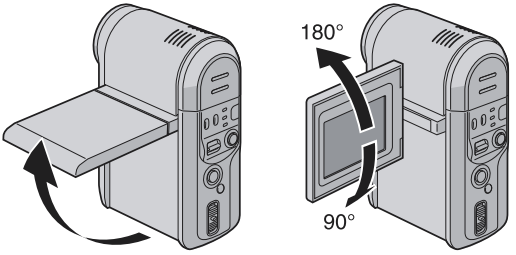
6 Press △▽ to input the month, and press ►II. Repeat to input the day, year, hour and minute.

7 Press **MENU** to return to the normal screen.

Built-in Clock's Rechargeable Lithium Battery
If the camera is not used for approx. 3 months, the clock's lithium battery will become discharged and the date/time stored in memory will be lost. When this occurs, first connect the camera to an AC outlet using the AC adapter for over 24 hours to charge the clock's rechargeable lithium battery. Then perform the date/time setting before using the camera.
Note that the camera can be used without setting the date/time.

LCD Monitor Adjustment

It is necessary to use the LCD monitor for the camera operation. Make sure to open the LCD monitor whenever you turn on the camera.



Pull on the bottom end of the LCD monitor to open it.

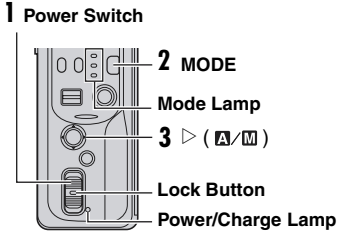
- The LCD monitor can be rotated 270° (90° downward, 180° upward).

NOTES:

- If the LCD monitor is rotated 180° upward, the LCD monitor faces to the front. It is useful when using self-timer for shooting.
- When the LCD monitor is turned approx. 80° to front, the monitor image appears inverted as it would when viewing a mirror. However, the actual recorded image does not appear inverted.

Operation Mode

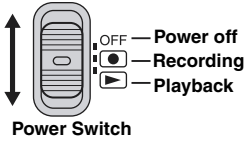
To turn on the camera, set the power switch to ● or ▶ while pressing down the lock button located on the switch.
● The power/charge lamp turns on.
To turn off the camera, set the power switch to **OFF**.



Set the appropriate operation mode according to your preference using the power switch, **MODE** and ▷ (A/M) buttons.

1 Power Switch Position

Set the power switch for recording (●) or playback (▶) while pressing down the lock button.



2 Recording/Playback Mode

Press **MODE** to select the recording/playback mode. The selected mode lamp lights up.

: Video mode (☞ pg. 20, 21)
: Still image mode (☞ pg. 22, 23)
: Voice mode (☞ pg. 24)

3 Auto/Manual Mode

Press ▷ (A/M) to switch the auto/manual recording mode. When manual mode is selected, the indicator M appears on the LCD monitor.

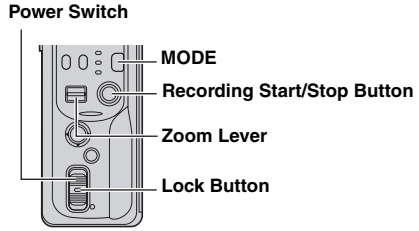
Auto mode:
You can record using no special effects or manual adjustments.

A/M Manual mode:
Manual recording is possible by setting various functions.

Power-Linked Operation

When the power switch is set to ●, you can also turn on/off the camera by opening/closing the LCD monitor.

Video Recording



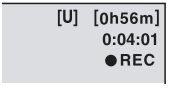
1 Set the power switch to ⏺ while pressing down the lock button located on the switch.

2 Press **MODE** to select 🎥.

- The camera is programmed to record videos on the medium in the CF slot by the factory preset. To switch the recording medium, see pages 26 and 27.
- To change the picture quality, see pages 26 and 28.

3 Press the recording start/stop button to start recording.

- Approximate remaining time for recording appears on the display.



4 To stop recording, press the recording start/stop button again.

NOTES:

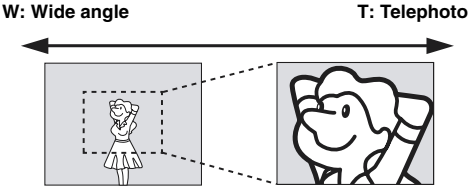
- If the record-standby mode continues for 5 minutes when using the battery pack, the camera's power shuts off automatically. To turn the camera on again, set the power switch to **OFF** then to ⏺, or close the LCD monitor then open it again. When using AC adapter, the camera enters the power save mode. To cancel the power save mode, perform any operation such as zooming.
- When the camera heats up, the [REC] indicator flashes. If the camera continues to heat up, shooting may be stopped to protect the recording medium. In this case, turn off the camera power, and then wait until the camera cools down. (☞ pg. 36)
- When shooting continuously, shooting is automatically stopped when a file size of 4 GB is reached.
- If data cannot be recorded or saved properly, the video files are not saved to the [SD_VIDEO] folder for regular video. Instead, the files are saved to the [EXTMOV] folder used for saving files created on the PC. To play back these files, see "Playing back files created on the PC" (☞ pg. 21).
- To turn the operation sounds off, see page 26.
- For approximate recording time, see page 42.

Zooming

Produces the zoom in/out effect, or an instantaneous change in image magnification.

Zoom In
Slide the zoom lever towards **T**.

Zoom Out
Slide the zoom lever towards **W**.



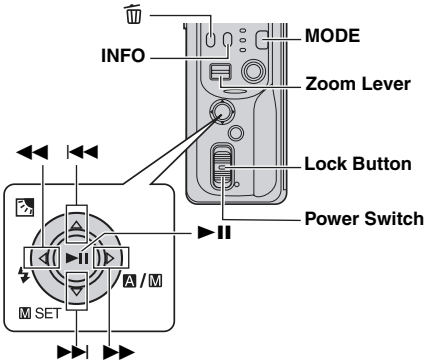
- The further you slide the zoom lever, the quicker the zoom action.
- Refer to the advanced operation manual for details. (☞ pg. 32)

Deleting Files

If you press 🗑 during recording mode, the file recorded most recently will be deleted.

- However, if the recording mode (video, still image or voice) is switched or the power is turned off and on again after recording, you cannot delete the file.

Video Playback



1 Set the power switch to ▶ while pressing down the lock button located on the switch.

2 Press **MODE** to select 🎥.

- The index screen for videos appears. The image appears on the index screen shows the first part of the shooting.
- To switch the medium to be played back, see pages 26 and 27.

3 Press △▽◁▷ to select the video file you want to play back.

4 Press ►II to start playback.

5 To pause playback, press ►II again.

To adjust the speaker volume
During playback slide the zoom lever towards **T** to turn up the volume, or towards **W** to turn down the volume.

How to use INFO button
Press **INFO** repeatedly. You can display the file information or remove the on-screen display.

Playing back files created on the PC
Video files created on the PC are located in the [EXTMOV] folder. (Refer to "SOFTWARE INSTALLATION AND USB CONNECTION GUIDE".)

To play these video files, press the recording start/stop button while the index screen is displayed in step **2**, and then proceed to step **3** after [MPG] is displayed.

- The fast forward, rewind, slow, frame-by-frame playback, and playlist creation functions are not available for files in the [EXTMOV] folder.

NOTES:

- The playback picture can be viewed in the LCD monitor or on a connected TV. (☞ pg. 25)
- If pause mode continues for 5 minutes during playback (video, still image or voice) when using the battery pack, the camera's power shuts off automatically. To turn the camera on again, set the power switch to **OFF**, then to ▶.
- When a cable is connected to the AV connector, the sound is not heard from the speaker or headphones.

Various Playback Operations

High-speed search
Press ◀◀ or ▶▶ during playback.

- Each press of the button increases the search speed for each direction. (–60x to +60x)

Locating the start point of the file or skip the file
Press I◀◀ or ▶▶I during playback or pause mode.

Frame-by-frame playback
Press ◀◀ or ▶▶ during pause mode.

- Each press of the button advances/reverses the still picture frame by frame.

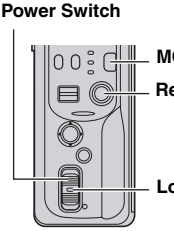
Slow motion playback
Press ◀◀ or ▶▶ for 2 or more seconds during pause mode.

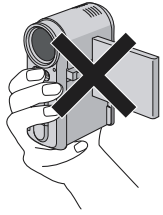
Deleting Video Files

Press 🗑, then press △▽ to select [EXECUTE] and press ►II.

- You can select the desired file to be deleted by pressing ◁ ▷.
- To delete multiple files at once, see pages 26 and 29.

Still Image Recording





1 Set the power switch to ● while pressing down the lock button located on the switch.

2 Press **MODE** to select 📷.

- The camera is programmed to record still images on the medium in the SD slot by the factory preset. To switch the recording medium, see pages 26 and 27.
- To change the image size and picture quality, see pages 26 and 29.

3 Press the recording start/stop button. The still image is recorded.

- To check how the image looks before recording, press the recording start/stop button halfway and hold. The 👤 indicator appears and stops blinking when the captured image is focused. To cancel the recording, release the recording start/stop button. To record it on the recording medium, press the recording start/stop button fully.

NOTES:

- If shooting is not performed for approx. 5 minutes when using the battery pack, the camera's power shuts off automatically. To perform shooting again, set the power switch to **OFF**, then to ●. When using AC adapter, the camera enters the power save mode. To cancel the power save mode, perform any operation such as zooming.
- To turn the shutter sound off, see page 26.
- For approximate number of storable images, see page 42.

Continuous Shooting

Keeping the recording start/stop button pressed in step **3** provides an effect similar to serial photography. (Interval between still images: approx. 0.3 seconds)
To use this function, set [CONTINUOUS SHOOTING] to [ON]. (☞ pg. 26, 29)

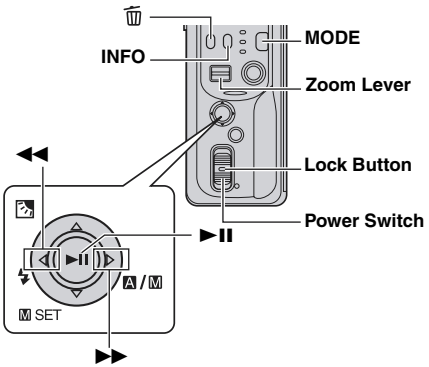
- Continuous shooting may not work well depending on the recording medium.

Deleting Files

If you press 🗑 during recording mode, the file recorded most recently will be deleted.

- However, if the recording mode (video, still image or voice) is switched or the power is turned off and on again after recording, you cannot delete the file.

Still Image Playback



1 Set the power switch to ▶ while pressing down the lock button located on the switch.

2 Press **MODE** to select 📷.

- A still image is displayed.
- To switch the medium to be played back, see pages 26 and 27.

3 Press ◀◀ to display the previous file. Press ▶▶ to display the next file.

How to use INFO button

Press **INFO** repeatedly. You can display the file information or remove the on-screen display.

NOTES:

- Images shot and stored on the recording media with another device may not be played back correctly.
- You can zoom in/out or rotate still images. For details, read the advanced operation manual. (☞ pg. 32)

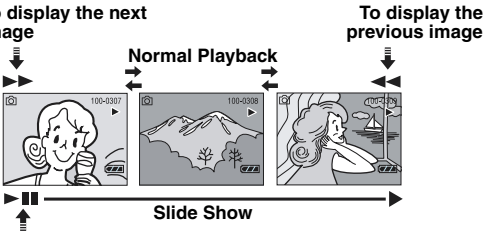
Slide Show

You can playback all the images stored in recording media automatically.

1 Perform steps **1** – **2** in the left column.

2 Press ►II to start the slide show.

- If you press ▽ during the slide show, files are displayed in descending order.
- If you press △ during the slide show, files are displayed in ascending order.
- To end the slide show, press ►II again.

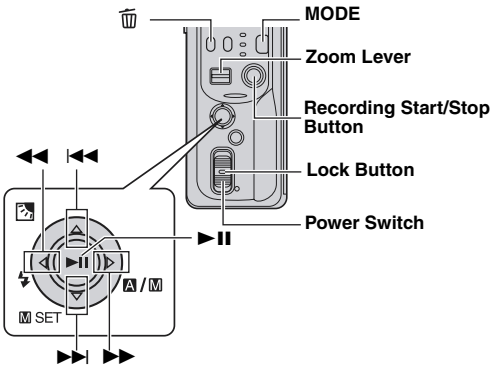


Deleting Still Image Files

Press 🗑, then press △▽ to select [EXECUTE] and press ►II.

- You can select the desired file to be deleted by pressing ◁ ▷.
- To delete multiple files at once, see pages 26 and 29.

Voice Recording



1 Set the power switch to ⏺ while pressing down the lock button located on the switch.

2 Press **MODE** to select 🎙.

- The camera is programmed to record voice on the medium in the SD slot by the factory preset. To switch the recording medium, see pages 26 and 27.
- To change the sound quality and recording level, see pages 26 and 30.

3 Press the recording start/stop button to start recording.

4 To stop recording, press the recording start/stop button again. The camera re-enters the record-standby mode.

NOTE:
For approximate recording time, see page 43.

Deleting Files

If you press 🗑 during recording mode, the file recorded most recently will be deleted.

- However, if the recording mode (video, still image or voice) is switched or the power is turned off and on again after recording, you cannot delete the file.

Voice Playback

1 Set the power switch to ▶ while pressing down the lock button located on the switch.

2 Press **MODE** to select 🎙.

- To change the playback speed, see pages 26 and 30.
- To switch the medium to be played back, see pages 26 and 27.

3 Press ►II to start playback.

4 To pause playback, press ►II again.

To adjust the speaker volume
During playback slide the zoom lever towards **T** to turn up the volume, or towards **W** to turn down the volume.

Playback Operations

High-Speed Search
Press ◀◀ or ▶▶ during playback.

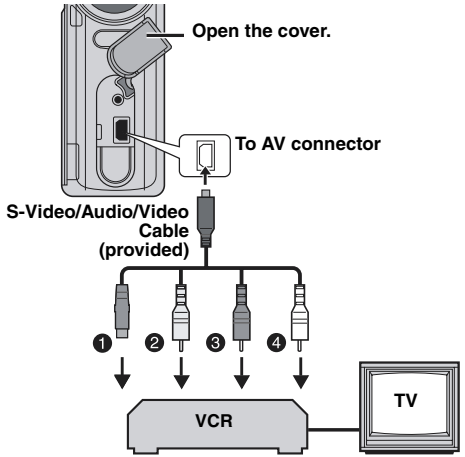
Locating the start point of the file or skip the file
Press I◀◀ or ▶▶I during playback or pause mode.

Deleting Voice Files

Press 🗑, then press △▽ to select [EXECUTE] and press ►II.

- You can select the desired file to be deleted by pressing ◁ ▷.
- To delete multiple files at once, see pages 26 and 29.

Connecting to a TV or VCR



❶ Black to S-VIDEO IN (Connect when your TV/VCR has S-VIDEO IN and A/V input connectors. In this case, it is not necessary to connect the yellow video cable.)
❷ Yellow to VIDEO IN (Connect when your TV/VCR has only A/V input connectors.)
❸ Red to AUDIO R IN*
❹ White to AUDIO L IN*
* Not required for watching still images only.

1 Make sure all units are turned off.

2 Connect the camera to a TV or VCR as shown in the illustration.

If using a VCR, go to step **3**.
If not, go to step **4**.

3 Connect the VCR output to the TV input, referring to your VCR's instruction manual.

4 Turn on the camera, the VCR and the TV.

5 Set the VCR to its AUX input mode, and set the TV to its VIDEO mode.

6 Start playback on the camera. (☞ pg. 21)

To choose whether or not the following displays appear on the connected TV

- Date/Time
  Set [DATE/TIME] to [AUTO], [ON] or [OFF]. (☞ pg. 26, 27)
- Counter
  Set [SCENE COUNTER] to [ON] or [OFF]. (☞ pg. 26, 27)

(Pressing INFO button also turns on/off the displays.)

NOTES:

- **It is recommended to use the AC Adapter as the power supply instead of the battery pack. (☞ pg. 14)**
- To monitor the picture and sound from the camera without inserting a recording medium, set the camera's power switch to [●], then set your TV to the appropriate input mode.
- Make sure you adjust the TV sound volume to its minimum level to avoid a sudden burst of sound when the camera is turned on.
- To connect the camera to a PC, refer to the software installation and USB connection guide.

Dubbing to a VCR

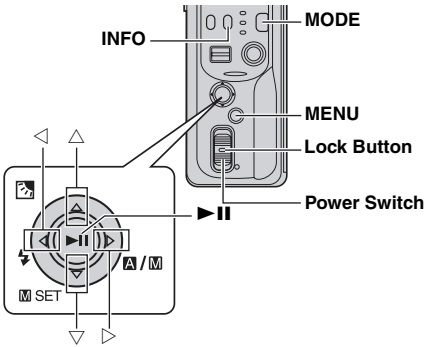
1 Perform step **1** to **6** above.

2 At the point you want to start dubbing, start recording on the VCR. (Refer to the VCR's instruction manual.)

3 To stop dubbing, stop recording on the VCR, then stop playback on the camera.

Changing the Menu Settings

You can change the menu settings to customize your camera. Access the desired menu screen by following the steps below, then change the various settings.



1 Select the operation mode.

For Recording Menus:
Set the power switch to ● while pressing down the lock button located on the switch.

For Playback Menus:
Set the power switch to ► while pressing down the lock button located on the switch.

2 Press **MODE** to select (video), (still image) or (voice).

3 Press **MENU**. The menu screen appears.

4 Select the desired sub menu and menu item with △▽ and ►II.

- To return to the normal screen, press **MENU**.
- To display the operation guide, press **INFO** when the menu screen is displayed.

NOTE:
Information on the following pages (☞ pg. 26 – 31) are only excerpts of menu settings.
Refer to the advanced operation manual in the CD-ROM for the full descriptions. (☞ pg. 32)

Common Menus for All Modes

[ ] = Factory-preset

BASIC SETTING

PRESET

EXECUTE: Resets all settings to the factory-preset.
[CANCEL]: Returns to menu screen without executing reset.

DEMO MODE

OFF: Disables the function.
[ON]: Activates demonstration mode and shows various features on the display.

OPERATION SOUND

OFF: Turns off operation sound.
BEEP: The beep sounds when the power is turned on or off, and at the beginning and end of recording.
[MELODY]: Instead of a beep, a melody sounds when any operation is performed.

❁ MEMORY CARD SETTING

VIDEO MODE

[CF SLOT] / SD SLOT

IMAGE MODE

CF SLOT / [SD SLOT]

VOICE MODE

CF SLOT / [SD SLOT]

Media selection can be set for each recording and playback mode: video (🎥), still image (📷) or voice (🎙).

CF SLOT: The CF card is selected as a recording medium.

SD SLOT: SD card is selected as a recording medium.

FORMAT

[CF SLOT] / SD SLOT

You can format (initialize) a recording medium in the CF or SD slot.

CLEAN UP

[CF SLOT] / SD SLOT

Writing speed of recording media tends to become slow after long period of repeated use. To regain the speed, execute cleanup periodically.

COPY/MOVE

COPY / MOVE

You can copy or move still image files between recording media in CF and SD slots.

NO. RESET

VIDEO / IMAGE / VOICE

By resetting the file number (name), a new folder will be made. The new files you are going to make will be stored in the new folder.

🕘 DISPLAY

BRIGHT

When this item is selected, the brightness control indicator appears. Adjust the brightness of the display using ◁ ▷, then press ►II.

DATE/TIME

OFF: The date/time does not appear.
[AUTO]: Displays the date/time for approx. 5 seconds when the power switch is set from **OFF** to ⦿.
ON: The date/time is always displayed.

SCENE COUNTER

[OFF]: Disables the function.
ON: Displays the counter during video mode.

CLOCK ADJUST

☞ "Date/Time Settings" (☞ pg. 18)

Video Recording Menus

[ ] = Factory-preset

QUALITY

Select the desired picture quality.

Mode (In order of the quality)	Size (pixels)	Bit rate
[ULTRA FINE]	720 x 480	8.5 Mbps
FINE	720 x 480	5.5 Mbps
NORMAL	720 x 480	4.2 Mbps
ECONOMY	352 x 240	1.5 Mbps

WIDE MODE

[OFF]: Disables the function.
D.WIDE: The zoom range is extended beyond the maximum optical zoom wide angle range.

WIND CUT

[OFF]: Disables the function.
ON: Helps cut down on noise created by wind.

GAIN UP

OFF: The image in the dark will be recorded with no picture brightness adjustment.
[ON]: The image in the dark will be brightened. But the overall appearance may become grainy.

DIS

OFF: Disables the function.
[ON]: Compensates for unstable images caused by camera-shake, particularly at high magnification.

CAMERA SETTING

ZOOM

10X: Only optical zoom is available up to 10X.
[40X]: Digital zoom is available up to 40X.
200X: Digital zoom is available up to 200X.

TELE MACRO

[OFF]: Disables the function.
ON: You can shoot a subject as large as possible at a distance of approx. 60 cm (2 ft).

Video Playback Menus

For the actual operations and details, refer to the advanced operation manual.

[ ] = Factory-preset

PLAY LIST

PLAY LIST CONTENTS / **EDIT** / **RENAME** / **DELETE**
You can create a play list and view your original video clips.

WIPE/FADER

[OFF] / **FADER-WHITE** / **FADER-BLACK** / **FADER-B.W** / **WIPE-CORNER** / **WIPE-WINDOW** / **WIPE-SLIDE** / **WIPE-DOOR** / **WIPE-SCROLL** / **WIPE-SHUTTER**
You can view videos with various effects of scene transition.

EFFECT

[OFF] / **SEPIA** / **MONOTONE** / **CLASSIC FILM** / **STROBE**
You can view videos with special image effects.

PROTECT

[CURRENT] / **FILE SELECT** / **PROTECT ALL** / **CANCEL ALL**
You can protect files from accidental erasure.

DELETE

[CURRENT] / **FILE SELECT** / **DELETE ALL**
You can delete unnecessary files.

Still Image Recording Menus

[ ] = Factory-preset

QUALITY

[FINE] / **STANDARD**
Select the desired image quality.

IMAGE SIZE

[1600 x 1200] / **1280 x 960** / **1024 x 768** / **640 x 480**
Select the desired image size.

SELF-TIMER

[OFF] / **2SEC** / **10SEC**
By setting the self-timer, a still image is recorded 2 or 10 seconds after pressing recording start/stop button.

CONTINUOUS SHOOTING

[OFF] / **ON**
☞ “Continuous Shooting” (☞ pg. 22)

GAIN

[80] / **160**
Select the ISO sensitivity to the desired setting.

NOTE:
The menu items of TELE MACRO are the same as in the description on page 28.

Still Image Playback Menus

[ ] = Factory-preset

DPOF

☞ Advanced operation manual

DIRECT PRINT

☞ Advanced operation manual

EFFECT

[OFF] / **SEPIA** / **MONOTONE**
You can view still images with special image effects.

NOTE:
The menu items of PROTECT and DELETE are the same as in the description on page 29.

Voice Recording Menus

[ ] = Factory-preset

QUALITY

Select the desired sound quality.

Mode (In order of the quality)	Bit rate
[FINE]	1,536 kbps
STANDARD	512 kbps
ECONOMY	256 kbps

RECORDING LEVEL

[HIGH] / **MIDDLE** / **LOW**
Select the desired voice recording level.

NOTE:
The menu items of WIND CUT are the same as in the description on page 28.

Voice Playback Menus

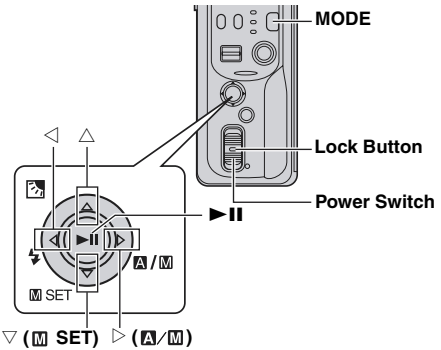
[ ] = Factory-preset

PLAYBACK SPEED

[NORMAL] / **FASTPLAY** / **SLOWPLAY**
Select the desired voice playback speed.

NOTE:
The menu items of PROTECT and DELETE are the same as in the description on page 29.

Menus for Manual Recording (MSET Menu)



1 Set the power switch to ● while pressing down the lock button located on the switch.
2 Press **MODE** to select 🎥 or 📷.
3 Press ▷ (A/M) so that M is displayed.
4 Press ▽ (M **SET**). The menu screen appears.
5 Press ◁ ▷ to select the desired sub menu.
6 Press ►II. The sub menu appears.
7 Press △▽ (or ◁▷) to select the desired menu item.
8 Press ►II again. Selection is complete.
● To return to the normal screen, press ▽ (M **SET**).

[ ] = Factory-preset

EXP.

[AUTO*] or [±0] / ±6* or ±2 (EV)****
Fine exposure adjustment is possible depending on the shooting condition.
* For video recording
** For still image recording

FOCUS

[AUTO] / **(manual)**
If correct focus may not be obtained depending on the shooting condition, use the manual focus mode.

WB

[AUTO] / **MWB** / **FINE** / **CLOUD** / **HALOGEN**
You can adjust the white balance setting manually or select an option.

SHUTTER

[AUTO] / **1/2** / **1/4** / **1/8** / **1/15** / **1/30** / **1/60** / **1/100** / **1/250** **1/500** / **1/1000*** / **1/2000*** / **1/4000***
You can select the shutter speed depending on the subject and shooting condition.
* Not available for still image recording.

P.AE

[OFF] / **SPORTS** / **SNOW** / **SPOTLIGHT** / **TWILIGHT**
Various programmed effects can be added to the scene.

EFFECT

[OFF] / **SEPIA** / **MONOTONE** / **CLASSIC FILM** / **STROBE**
Creative effects can be added to the image.

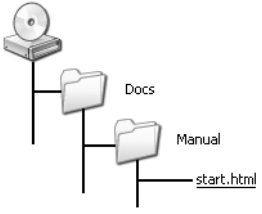
For Advanced Operations

Read the advanced operation manual provided as HTML format in the CD-ROM for more information. To access to the HTML files, follow the procedure below.

1 Load the provided CD-ROM onto your PC.

2 Right-click on the CD-ROM icon in the [My Computer] window, then click [Open].

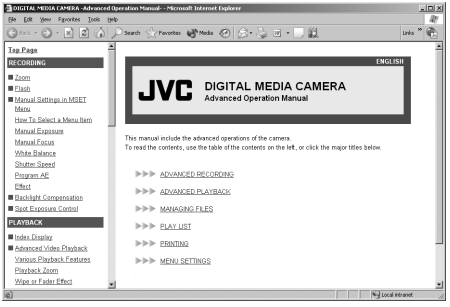
3 Double-click the [Docs] folder, then double-click the [Manual] folder.



4 Double click “start.html”.

5 Select the language by clicking the language button.

6 Now you can see menus on the left side and instructions.



Cleaning the Camera

Before cleaning, turn off the camera and remove the battery pack and AC adapter.

To clean the exterior
Wipe gently with a soft cloth. Put the cloth in diluted mild soap and wring it well to wipe off heavy dirt. Then wipe again with a dry cloth.

To clean the LCD monitor
Wipe gently with a soft cloth. Be careful not to damage the monitor.

To clean the lens
Wipe gently with lens cleaning paper.

NOTES:

- Avoid using strong cleaning agents such as benzine or alcohol.
- Cleaning should be done only after the battery pack has been removed or other power units have been disconnected.
- Mould may form if the lens is left dirty.
- When using a cleaner or chemically treated cloth refer to the cautions of each product.

Troubleshooting

If the problem still exists after following the instructions below, please consult your nearest JVC dealer.

The camera is a microcomputer-controlled device. External noise and interference (from a TV, a radio, etc.) might prevent it from functioning properly. In such cases, first disconnect its power supply unit (battery pack, AC adapter, etc.) and wait a few minutes; and then re-connect it and proceed as usual from the beginning.

Power

No power is supplied.
- The power is not connected properly.

➜Connect the AC Adapter securely. (☞ pg. 14)
- The battery pack is not attached firmly.

➜Detach the battery pack once again and re-attach it firmly. (☞ pg. 14)
- The battery is dead.

➜Replace the dead battery with a fully charged one. (☞ pg. 14)

Recording

Recording cannot be performed.
- [MEMORY CARD IS FULL] appears.

➜Replace with new recording medium or delete unnecessary files. (☞ pg. 16, 29)
- Recording medium is not selected properly.

➜Select the recording medium. (☞ pg. 17)
- The rear panel is open.

➜Close the cover and set the power switch to **OFF**, then to ●.

When shooting a subject illuminated by bright light, vertical lines appear.
- This is not a malfunction.

When the screen is under direct sunlight during shooting, the screen becomes red or black for an instant.
- This is not a malfunction.

During recording, the date/time does not appear.
- [DATE/TIME] is set to [OFF].

➜Set [DATE/TIME] to [ON]. (☞ pg. 18)

The LCD monitor indications blink.
- Certain modes of wipe/fader, program AE, effect, DIS and other functions that cannot be used together are selected at the same time.

Digital zoom does not work.
- [ZOOM] is set to [10X] (optical zoom).

➜Set [ZOOM] to [40X] or [200X]. (☞ pg. 28)

Playback

Playback cannot be performed.
- Recording medium is not selected properly.

➜Select the recording medium. (☞ pg. 17)
- The rear panel is open.

➜Close the cover and set the power switch to **OFF**, then to ►.
- Playback starts, but there is no picture on TV.

➜Set the TV's input mode or channel appropriate for video playback.

Advanced features

The focus does not adjust automatically.
- Focus is set to the manual mode.

➜Set focus to the automatic mode. (☞ pg. 31)
- The lens is dirty or covered with condensation.

➜Clean the lens and check the focus again. (☞ pg. 32)

The color of the image looks strange.
- The light source or the subject does not include white. Or there are various different light sources behind the subject.

➜Try manual white balance adjustment. (Refer to the advanced operation manual in CD-ROM. ☞ pg. 32)

The recorded image is too dark.
- Shooting was performed under backlit conditions.

➜Try backlight compensation. (Refer to the advanced operation manual in CD-ROM. ☞ pg. 32)

The recorded image is too bright.
- The subject is too bright.

➜Set [P. AE] to [SPOTLIGHT]. (☞ pg. 31)

White balance setting cannot be activated.
- The sepia (SEPIA) or monotone (MONOTONE) mode is activated.

➜Turn off the sepia (SEPIA) or monotone (MONOTONE) mode before setting white balance. (☞ pg. 31)

The black & white fader does not work.
- The sepia (SEPIA) or monotone (MONOTONE) mode is activated.

➜Turn off the sepia (SEPIA) or monotone (MONOTONE) mode. (☞ pg. 31)

The image looks like the shutter speed is too slow.
- When shooting in the dark, the unit becomes highly sensitive to light when [GAIN UP] is set to [ON].

➜If you want the lighting to look more natural, set [GAIN UP] to [OFF]. (☞ pg. 28)

Other problems

The power/charge lamp on the camera does not light during charging.
- Charging is difficult in places subject to extremely high/low temperatures.

➜To protect the battery, it is recommended to charge it in places with a temperature of 10°C to 35°C (50°F to 95°F). (☞ pg. 37)
- The battery cover is open.

➜Close the cover. (☞ pg. 14)

[SET DATE/TIME!] appears.
- The built-in clock's rechargeable lithium battery is discharged.
- The previously set date/time is erased.

➜Connect the camera to an AC outlet using the AC Adapter for over 24 hours to charge the clock's lithium battery. Then set the date/time. (☞ pg. 18)

Files cannot be deleted.
- Files are protected.

➜Remove protection from the files and delete them. (☞ pg. 29)

When the image is printed from the printer, a black bar appears at the bottom of the screen.
- This is not a malfunction.

➜By recording with DIS activated, this can be avoided. (☞ pg. 28)

Images on the LCD monitor appear dark or whitish.
- In places subject to low temperature, images become dark due to the characteristics of the LCD monitor. This is not a malfunction.

➜Adjust the brightness and angle of the LCD monitor. (☞ pg. 18, 27)
- When the LCD monitor's fluorescent light reaches the end of its service life, images on the LCD monitor become dark.

➜Consult your nearest JVC dealer.

Colored bright spots appear all over the LCD monitor.
- The LCD monitor is made with high precision technology. However, black spots or bright spots of light (red, green or blue) may appear constantly on the LCD monitor. These spots are not recorded on the picture. This is not due to any defect of the unit. (Effective dots: more than 99.99 %)

The SD card cannot be removed from the camera.

➜Push in the SD card a few more times.

Picture does not appear on the LCD monitor.
- The LCD monitor's brightness setting is too dark.

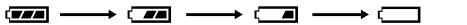
➜Adjust the brightness of the LCD monitor. (☞ pg. 27)

Warning Indications

The following indications appear on the screen.

(Battery indicator)
Displays the battery remaining power.

Remaining power level



High Exhausted

- As the battery power comes close to nil, the battery indicator blinks. When the battery power is exhausted, power turns off automatically.

SET DATE/TIME!

- Appears when the date/time is not set. (☞ pg. 18)
- Appears when the built-in clock (lithium) battery is discharged and the previously set date/time is erased. (☞ pg. 18)

LENS CAP
Appears for 5 seconds after power is turned on if the lens cap is attached or when it is dark.

PLEASE INSERT MEMORY CARD
Appears when no recording medium is inserted in the selected slot. (☞ pg. 16)

THIS CARD IS NOT FORMATTED
Appears when an unformatted recording medium is inserted.

MEMORY CARD IS FULL
Appears when the recording medium is full and recording is not possible.

CHECK CARD'S WRITE PROTECTION SWITCH
Appears when you attempt recording when the write protection tab on the SD card is set to the "LOCK" position.

THIS CARD IS NOT FOR RECORDING VIDEO
Appears when a recording medium which is not capable of video recording is inserted.

UNSUPPORTED FILE!
Appears when playing back a file that is not compatible with this camera's file format.

NO VIDEO FILES STORED!
Appears if there are no video files when you attempt video playback.

NO IMAGE FILES STORED!
Appears if there are no still image files when you attempt still image playback.

NO VOICE FILES STORED!
Appears if there are no voice files when you attempt voice playback.

THIS CARD IS NOT FOR CONTINUOUS SHOOTING
Appears when the recording medium is not capable of continuous shooting.

CLOSE COVER
Appears when the recording medium cover is opened during file copy/move operation.

NO MEMORY CARD
Appears when recording media are not inserted to both of slots for file copy/move operation.

NO SUPPORTED FILES
Appears when there is no JPEG (still image) files to be copied or moved in recording media.

NUMBER OF FOLDERS OVERFLOW
Appears when the number of folders exceeds the limit for file copy/move operation.

MEMORY CARD ERROR!
REINSERT CARD OR CHANGE CARD
Appears when the camera does not recognize the loaded recording medium. Remove the medium once and insert it again or replace with another medium.

FILE SYSTEM MAY HAVE PROBLEM
FORMAT IS RECOMMENDED AFTER COPYING WANTED DATA
The file system of the recording medium may have a problem. It is recommended to copy the data for backup, then format the medium.

VIDEO MANAGEMENT FILE IS BROKEN
TO RECORD/PLAYBACK VIDEO, RECOVERY IS REQUIRED
The video management file is broken. Recovery is required to record or play back video files. Follow the menu guide if you want to execute recovery.

NO VIDEO MANAGEMENT FILE
VIDEO FILES HAVE BEEN MOVED TO MPEG FOLDER
The data cannot be recorded properly, or the video management file is deleted or not found. The extension of the corresponding video file is changed from ".MOD" to ".MPG". Video files have been moved to MPEG (EXTMOV) folder.

PLAY LIST'S MANAGEMENT INFORMATION IS BROKEN
REMAKE PLAY LIST AGAIN
The management information of play list is broken. Create the play list again.

NO REGISTERED SCENES IN PLAY LIST
SOME OF SCENES MAY NOT BE PLAYED BACK
The video files registered in the play list do not exist. Some of the scenes may not be played back.

REGISTERED SCENES IN PLAY LIST IS EMPTY
THIS PLAY LIST WILL BE DELETED
There is no scenes registered in the play list. The play list will be deleted.

CAMERA TEMPERATURE IS GOING UP
TURN CAMERA OFF, PLEASE WAIT
The temperature of the camera is too high. Turn off the power, then wait for a while.

CAMERA TEMPERATURE IS TOO LOW
KEEP CAMERA POWER ON, PLEASE WAIT
The temperature of the camera is too low. Keep the power on, then wait for a while.

RECORDING MAY NOT BE CORRECT ON THE MEMORY CARD
The data may not be recorded on the recording medium correctly. Try recording again.
Otherwise, clean up the recording medium.

MEMORY CARD CANNOT BE PLAYED BACK CORRECTLY
The recording medium cannot be played back correctly. Try playback again.

CANNOT USE IN VIDEO MODE
The operation is not available in the video mode.

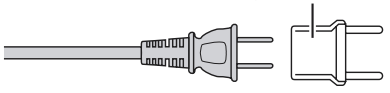
Cautions

AC Adapter

When using the AC adapter in areas other than the USA
The provided AC adapter features automatic voltage selection in the AC range from 110 V to 240 V.

USING HOUSEHOLD AC PLUG ADAPTER
In case of connecting the unit's power cord to an AC wall outlet other than American National Standard C73 series type use an AC plug adapter, called a "Siemens Plug", as shown.
For this AC plug adapter, consult your nearest JVC dealer.

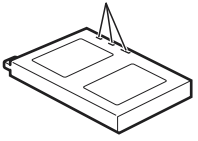
Plug adapter



Battery Packs

The supplied battery pack is a lithium-ion battery. Before using the supplied battery pack or an optional battery pack, be sure to read the following cautions:

Terminals



- **To avoid hazards**
  - ... **do not** burn.
  - ... **do not** short-circuit the terminals. When transporting, make sure the provided battery cap is attached to the battery. If the battery cap is misplaced, carry the battery in a plastic bag.
  - ... **do not** modify or disassemble.
  - ... **do not** expose the battery to temperatures exceeding 60°C (140°F), as this may cause the battery to overheat, explode or catch fire.
  - ... use only specified chargers.
- **To prevent damage and prolong service life**
  - ... do not subject to unnecessary shock.
  - ... charge in an environment where temperatures are within the tolerances shown in the chart below. This is a chemical reaction type battery — cooler temperatures impede chemical reaction, while warmer temperatures can prevent complete charging.
  - ... store in a cool, dry place. Extended exposure to high temperatures will increase natural discharge and shorten service life.
  - ... fully charge and then fully discharge the battery every 6 months when storing the battery pack over a long period time.
  - ... remove from charger or powered unit when not in use, as some machines use current even when switched off.

NOTES:

- It is recommended that only genuine JVC batteries are used in this camera. Using generic non-JVC batteries can cause damage to the internal charging circuitry.
- It is normal for the battery pack to be warm after charging, or after use.
  Temperature range specifications
  Charging: 10°C to 35°C (50°F to 95°F)
  Operation: 0°C to 40°C (32°F to 104°F)
  Storage: –20°C to 50°C (–4°F to 122°F)
- The lower the temperature, the longer recharging takes.
- Charging times are for a fully discharged battery pack.

Recording Medium

- **Be sure to follow the guidelines below to prevent corruption or damage to your recorded data.**
  - Do not bend or drop the recording medium, or subject it to strong pressure, jolts or vibrations.
  - Do not splash the disk with water.
  - Do not use, replace, or store the disk in locations that are exposed to strong static electricity or electrical noise.
  - Do not turn off the camera power or remove the battery or AC adapter during shooting, playback, or when otherwise accessing the recording medium.
  - Do not bring the recording medium near objects that have a strong magnetic field or that emit strong electromagnetic waves.
  - Do not store the recording medium in locations with high temperature or high humidity.
  - Do not touch the metal parts.
- **Copy the recorded files to your PC. JVC shall not be responsible for any lost data. (It is recommended that you copy the data from your PC to DVD or other media for storage.)**
- **A malfunction may cause the recording medium to fail to operate properly. JVC shall not provide any compensation for any lost contents.**

LCD Monitor

- **To prevent damage to the LCD monitor, DO NOT**
  - ... push it strongly or apply any shocks.
  - ... place the camera with LCD monitor on the bottom.
- **To prolong service life**
  - ... avoid rubbing it with coarse cloth.
- **Be aware of the following phenomena for LCD monitor use. These are not malfunctions.**
  - ... While using the camera, the surface around the LCD monitor and/or the back of the LCD monitor may heat up.
  - ... If you leave power on for a long time, the surface around the LCD monitor becomes hot.

Main Unit

- **For safety, DO NOT**
  - ... open the camera's chassis.
  - ... disassemble or modify the unit.
  - ... short-circuit the terminals of the battery pack. Keep it away from metallic objects when not in use.
  - ... allow inflammables, water or metallic objects to enter the unit.
  - ... remove the battery pack or disconnect the power supply while the power is on.
  - ... leave the battery pack attached when the camera is not in use.
- **Avoid using the unit**
  - ... in places subject to excessive humidity or dust.
  - ... in places subject to soot or steam such as near a cooking stove.
  - ... in places subject to excessive shock or vibration.
  - ... near a television set.
  - ... near appliances generating strong magnetic or electric fields (speakers, broadcasting antennas, etc.).
  - ... in places subject to extremely high (over 40°C or 104°F) or extremely low (under 0°C or 32°F) temperatures.
- **DO NOT leave the unit**
  - ... in places of over 50°C (122°F).
  - ... in places where humidity is extremely low (below 35%) or extremely high (above 80%).
  - ... in direct sunlight.
  - ... in a closed car in summer.
  - ... near a heater.
- **To protect the unit, DO NOT**
  - ... allow it to become wet.
  - ... drop the unit or strike it against hard objects.
  - ... subject it to shock or excessive vibration during transportation.
  - ... keep the lens directed at extremely bright objects for long periods.
  - ... expose the lens to direct sunlight.
  - ... carry it by holding the LCD monitor.
  - ... swing it excessively when using the hand strap or the grip.
  - ... swing the soft camera case excessively when the camera is inside it.

How to Handle a CD-ROM

- Take care not to soil or scratch the mirror surface (opposite to the printed surface). Do not write anything or put a sticker on either the front or back surface. If the CD-ROM gets dirty, gently wipe it with a soft cloth outward from the center hole.
- Do not use conventional disc cleaners or cleaning spray.
- Do not bend the CD-ROM or touch its mirror surface.
- Do not store your CD-ROM in a dusty, hot or humid environment. Keep it away from direct sunlight.

Serious malfunctioning

If malfunctioning occurs, stop using the unit immediately and consult your local JVC dealer.

The camera is a microcomputer-controlled device. External noise and interference (from a TV, a radio, etc.) might prevent it from functioning properly. In such cases, first disconnect its power supply unit (battery pack, AC adapter, etc.) and wait a few minutes and then re-connect it and proceed as usual from the beginning.

Declaration of Conformity

Model Number	: GZ-MC100U
Trade Name	: JVC
Responsible party	: JVC AMERICAS CORP.
Address	: 1700 Valley Road Wayne, N. J. 07470
Telephone Number	: 973-317–5000

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not approved by JVC could void the user's authority to operate the equipment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.
Increase the separation between the equipment and receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced radio/ TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Specifications

Camera

For general

Power supply
DC 11 V (Using AC adapter)
DC 7.2 V (Using battery pack)
Power consumption
Approx. 4.9 W
Approx. 7.7 W (Maximum; when charging a battery)
Dimensions (W x H x D)
41 mm x 103 mm x 71 mm (1-11/16" x 4-1/16" x 2-13/16")
Weight
Approx. 245 g (0.54 lbs)
(without battery, removable hard disk, lens cap and hand strap)
Approx. 315 g (0.7 lbs)
(incl. battery, removable hard disk, lens cap and hand strap)
Operating temperature
0°C to 40°C (32°F to 104°F)
Operating humidity
35% to 80%
Storage temperature
–20°C to 50°C (–4°F to 122°F)
Pickup
1/3.6" CCD
Lens
F 1.8 to 2.2, f = 4.5 mm to 45 mm, 10:1 power zoom lens
Filter diameter
ø30.5 mm
LCD monitor
1.8" diagonally measured, LCD panel/TFT active matrix system
Speaker
Monaural
Flash
Within 2 m (recommended shooting distance)

For video/audio

Format
SD-VIDEO
Recording/Playback format
Video: MPEG-2-PS
Audio: Dolby Digital AC-3 (2 ch)
Signal format
NTSC standard
Recording mode (video)
ULTRA FINE: 720 x 480 pixels, 8.5 Mbps (CBR)
FINE: 720 x 480 pixels, 5.5 Mbps (CBR)
NORMAL: 720 x 480 pixels, 4.2 Mbps (VBR)
ECONOMY: 352 x 240 pixels, 1.5 Mbps (VBR)
Recording mode (audio)
ULTRA FINE: 48 kHz, 384 kbps
FINE: 48 kHz, 384 kbps
NORMAL: 48 kHz, 256 kbps
ECONOMY: 48 kHz, 128 kbps

For still image

Format
JPEG
Image size
4 modes (1600 x 1200 / 1280 x 960 / 1024 x 768 / 640 x 480)
Picture quality
2 modes (FINE/STANDARD)

For voice

Format
Linear PCM
Recording mode
FINE: 48 kHz, 1,536 kbps, 16 bit, stereo
STANDARD: 16 kHz, 512 kbps, 16 bit, stereo
ECONOMY: 8 kHz, 256 kbps, 16 bit, stereo

For connectors

AV
S-Video output:
Y: 1.0 V (p-p), 75 Ω, analog
C: 0.29 V (p-p), 75 Ω, analog
Video output: 1.0 V (p-p), 75 Ω, analog
Audio output: 300 mV (rms), 1 kΩ, analog, stereo
Headphone output
ø2.5 mm, stereo
USB
Mini USB-B type, USB 1.1/2.0 compliant

AC Adapter

Power requirement
AC 110 V to 240 V∼, 50 Hz/60 Hz
Output
DC 11 V ⎓, 1 A

Design and specifications subject to change without notice.

Recording Time and Number of Images

The tables below show the approximate recording time and number of storable images.

- The number increases or decreases depending on the image size, picture quality and other conditions (☞ pg. 28, 29, 30). The first column in the table indicates the conditions.
- The provided 4 GB removable hard disk is indicated with * mark.

: Approximate recording time (for video)

(The numbers indicate “minutes”.)

- Removable hard disk

Quality	2 GB	4 GB*
ULTRA FINE	30	60
FINE	45	90
NORMAL	60	120
ECONOMY	150	300

- The camera is not compatible with a removable hard disk of 1GB or less.

- SD Card/CompactFlash Card

Quality	128 MB	256 MB	512 MB	1 GB
ULTRA FINE	2	4	8	16
FINE	3	6	12	24
NORMAL	4	7	15	31
ECONOMY	10	21	43	86

- The camera is compatible with the high-speed card only. (SD card: 10 Mbps or faster, CompactFlash card: 40x or faster)
- Recommended SD cards are products of Panasonic, Toshiba or SanDisk.
- Recommended CompactFlash cards are products of Lexar, SanDisk or Hagiwara Sys-Com.

: Approximate number of storable images (for still image)

- Removable hard disk

Image size/quality	2 GB	4 GB*
640 x 480/FINE	9999	9999
640 x 480/STANDARD	9999	9999
1024 x 768/FINE	6826	9999
1024 x 768/STANDARD	9999	9999
1280 x 960/FINE	4376	8752
1280 x 960/STANDARD	9999	9999
1600 x 1200/FINE	2797	5595
1600 x 1200/STANDARD	9142	9999

- SD Card

Image size/quality	32 MB	64 MB	256 MB	1 GB
640 x 480/FINE	205	425	2210	7756
640 x 480/STANDARD	375	755	5200	9999
1024 x 768/FINE	95	200	855	3412
1024 x 768/STANDARD	185	375	1715	9999
1280 x 960/FINE	60	125	550	2188
1280 x 960/STANDARD	120	250	1100	7110
1600 x 1200/FINE	34	65	285	1398
1600 x 1200/STANDARD	50	110	480	4570

- Recommended SD cards are products of Panasonic, Toshiba or SanDisk.

● CompactFlash Card

Image size/quality	64 MB	128 MB	256 MB	1 GB
640 x 480/FINE	425	1115	2235	7756
640 x 480/STANDARD	755	2605	5215	9999
1024 x 768/FINE	200	430	865	3412
1024 x 768/STANDARD	375	865	1735	9999
1280 x 960/FINE	125	280	560	2188
1280 x 960/STANDARD	250	560	1120	7110
1600 x 1200/FINE	65	145	290	1398
1600 x 1200/STANDARD	110	245	490	4570

• Recommended CompactFlash cards are products of Lexar, SanDisk or Hagiwara Sys-Com.

: Approximate recording time (for voice)

(The numbers indicate “minutes”.)

● Removable hard disk

Quality	4 GB*
FINE	320
STANDARD	960
ECONOMY	1960

EN

JVC

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US Printed in Japan
0904HOH-AL-VP

ENGLISH

JVC SOFTWARE INSTALLATION AND USB CONNECTION GUIDE

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Printed in Japan
0904FOH-AL-VP

JVC SOFTWARE LICENSE AGREEMENT

IMPORTANT

TO CUSTOMERS: PLEASE MAKE SURE TO READ THIS CAREFULLY BEFORE INSTALLING OR USING THE SOFTWARE PROGRAM NAMED "DIGITAL PHOTO NAVIGATOR" ("Program") ON YOUR PC.

The right to use the Program is granted by Victor Company of Japan, Limited ("JVC") to You only on the condition that You agree to the following.

Should You not agree to the terms hereof, You may not install or use the Program. HOWEVER, INSTALLING OR USING THE PROGRAM INDICATES YOUR ACCEPTANCE OF THESE TERMS AND CONDITIONS.

1 COPYRIGHT; OWNERSHIP

You acknowledge that all copyrights and other intellectual property rights in the Program are owned by JVC and its licensor, and remain vested in JVC and such licensor. The Program is protected under the copyright law of Japan and other countries, and related Conventions.

2 GRANT OF LICENSE

(1) Subject to the conditions of this Agreement, JVC grants to You a non-exclusive right to use the Program. You may install and use the Program on a HDD or other storage devices incorporated in Your PC.

(2) You may make one (1) copy of the Program solely for your personal backup or archival purposes.

3 RESTRICTION ON THE PROGRAM

(1) You may not reverse engineer, decompile, disassemble, revise or modify the Program, except to the extent that expressly permitted by applicable law.

(2) You may not copy or use the Program, in whole or in part, other than as expressly specified in this Agreement.

(3) You have no right to grant a license to use the Program, and may not distribute, rent, lease or transfer the Program to any third party or otherwise let them use the Program.

CONTINUED ON NEXT PAGE

4 LIMITED WARRANTY

JVC warrants that any media in which the Program is embodied are free from any defects in materials and workmanship for a period of thirty (30) days from the date of Your purchasing any our products accompanying the Program. JVC's entire liability and your exclusive remedy in connection with the Program shall be replacement of such defective media. EXCEPT FOR THE EXPRESS WARRANTIES STATED HEREIN AND TO THE EXTENT PERMITTED BY APPLICABLE LAW, JVC AND ITS LICENSORS DISCLAIM ANY OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN REGARD TO THE PROGRAM AND THE ACCOMPANYING PRINTED MATERIALS. SHOULD THERE BE ANY PROBLEM ARISING FROM OR CAUSED BY THE PROGRAM, YOU SHOULD SETTLE ALL SUCH PROBLEM AT YOUR OWN COST AND EXPENSE.

5 LIMITED LIABILITY

TO THE EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL JVC AND ITS LICENSORS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER, REGARDLESS OF THE FORM OF ACTION WHETHER IN CONTRACT, TORT OR OTHERWISE ARISING OUT OF OR IN CONNECTION WITH THE USE OF OR INABILITY TO USE THE PROGRAM, EVEN IF JVC HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. YOU WILL INDEMNIFY AND HOLD HARMLESS JVC FROM ANY LOSS, LIABILITY OR COST ARISING OUT OF OR IN ANY WAY CONNECTED TO CLAIMS FROM ANY THIRD PARTY RELATING TO THE USE OF THE PROGRAM.

6 TERM

This Agreement will become effective on the date when You install and use the Program on Your machine, and continue to be in effect until the termination under the following provision.
Should You breach any provision of this Agreement, JVC may terminate this Agreement without giving any notice to You. In this event, JVC may claim against You for any damages caused by Your breach. Should this Agreement be terminated, You must immediately destroy the Program stored in Your machine (including the erasing from any memory in Your PC), and no longer own such Program.

7 EXPORT CONTROL

You agree that You will not ship, transfer or export the Program or underlying information and technology to any countries to which Japan and other relevant countries have initiated an embargo on such goods.

8 U.S. GOVERNMENT USER

If You are an agency of the United States of America (the "Government"), You acknowledge JVC's representation that the Program is a "Commercial Item" as defined in Federal Acquisition Regulation (FAR) part 2.101 (g) consisting unpublished "Commercial Computer Software" as those items are used at FAR part 12.212 and is only licensed to You with the same use rights JVC grants all commercial end users pursuant to the terms of this Agreement.

CONTINUED ON NEXT PAGE

9 GENERAL

(1) No modification, change, addition, deletion or other alternation of or to this Agreement will be valid unless reduced to writing and signed by an authorized representative of JVC.

(2) If any part of this Agreement is held invalid by or in conflict with any law having jurisdiction over this Agreement, the remaining provisions will remain in full force and effect.

(3) This Agreement shall be governed by and interpreted under the laws of Japan. The Tokyo District Court has jurisdiction over all disputes which may arise with respect to the execution, interpretation and performance of this Agreement.

Victor Company of Japan, Limited

NOTE:

If You acquired the Program in Germany, the provisions of Sections 4 (Limited Warranty) and 5 (Limited Liability) provided above will be replaced with those of the German version of this Agreement.

CAUTION:

- Operate this equipment according to the operating procedures described in this manual.
- Use only the provided CD-ROM. Never use any other CD-ROM to run this software.
- Do not attempt to modify this software.
- Changes or modifications not approved by JVC could void user's authority to operate the equipment.

How to handle a CD-ROM

- Take care not to soil or scratch the mirror surface (opposite to the printed surface). Do not write anything or put a sticker on either the front or back surface. If the CD-ROM gets dirty, gently wipe it with a soft cloth outward from the center hole.
- Do not use conventional disc cleaners or cleaning spray.
- Do not bend the CD-ROM or touch its mirror surface.
- Do not store your CD-ROM in a dusty, hot or humid environment. Keep it away from direct sunlight.

You can find the latest information (in English) on the provided software program at our world wide web server at http://www.jvc-victor.co.jp/english/global-e.html

Notice for Users

Use of this software is authorized according to the terms of the software license.

JVC

When contacting the nearest JVC office or agency in your country about this software (refer to the JVC Worldwide Service Network at http://www.jvc-victor.co.jp/english/worldmap/index-e.html), please fill out the following and have the appropriate information ready.

Product Name		
Model		
Problem		
Error Message		
PC	Manufacturer	
	Model	☐ Desktop ☐ Laptop
	CPU	
	OS	
	Memory	MB
	Available Hard Disk Space	MB

Please note that it may take some time to respond to your questions, depending on their subject matter.
JVC cannot answer questions regarding basic operation of your PC, or questions regarding specifications or performance of the OS, other applications or drivers.

CyberLink

For details of CyberLink's technical support service, refer to the "Readme" of each software. To access "Readme", refer to "User's Guide/Help/Readme" (☞ pg. 15).

System Requirements

■ Windows®

The following requirements must be satisfied to connect a camera to a PC and to use Digital Photo Navigator.

OS	: Windows® Millennium Edition [Me] (pre-installed), Windows® 2000 Professional [2000] (pre-installed), Windows® XP Home Edition [XP] (pre-installed), or Windows® XP Professional [XP] (pre-installed)
CPU	: Intel® MMX™ Pentium®, at least 200 MHz
RAM	: At least 64 MB
Free hard disk space	: At least 40 MB for installation, at least 500 MB recommended
Connector	: USB 1.1/2.0 connector
Display	: Must be capable of displaying 800 x 600 dots with 16-bit color
Miscellaneous	: Internet Explorer 5.5 or later

CyberLink DVD Solution

In addition to the requirements above, the following requirements must be satisfied to use CyberLink DVD Solution.

OS	: Windows® Millennium Edition [Me] (pre-installed), Windows® 2000 Professional [2000] (pre-installed), Windows® XP Home Edition [XP] (pre-installed), or Windows® XP Professional [XP] (pre-installed)
CPU	: Intel® Pentium® III, at least 700 MHz (Intel® Pentium® 4, at least 2 GHz recommended)
RAM	: At least 128 MB (at least 256 MB recommended)
Free hard disk space	: At least 350 MB for installation For creating DVD Video, at least 10 GB recommended For creating VCD, at least 1 GB recommended
Connector	: USB1.1/2.0 connector
Display	: Must be capable of displaying 1024 x 600 dots
Miscellaneous	: Internet Explorer 5.5 or later DirectX 9.0 or later
Supported media	: DVD-Video: DVD-R/-RW, DVD+R/+RW DVD-VR: DVD-RW, DVD+RW, DVD-RAM VideoCD: CD-R/RW For more details, refer to CyberLink web site: http://www.gocyberlink.com

- The system requirements information above is not a guarantee that the provided software will work on all personal computers meeting those requirements.
- Windows® is either registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.
- Other product and company names included in this instruction manual are trademarks and/or registered trademarks of their respective holders.
- For more details, refer to CyberLink web site: http://www.gocyberlink.com/english/products/powerproducer/2_gold/comp_dvd_drives.jsp

Software Installation

Follow the procedure described below to install the software. From the [SETUP] screen in step **2**, you can install the following drivers or software. Quit any other software you are using. (Check that there are no other application icons on the status bar.)

Digital Photo Navigator 1.0

This application is used to organize still images and convert them into a variety of formats.

CyberLink DVD Solution

PowerProducer2Gold NE

PowerProducer2Gold NE is software for creating movie discs incorporating not only video but also slideshows. This software uses a simple wizard format for creating a wide range of different format discs. You can also edit imported video.
You can import video from the camera, edit it, and then create a slideshow from still images. You can create a customized menu for the video or slideshow and write the contents to DVD or other media.

PowerDirectorExpress NE

PowerDirectorExpress NE is software for easily editing MPEG, AVI, and other video files, still images, and other contents for creating a movie. This software has an interface that allows editing in either timeline or storyboard mode, maintains superior image quality, uses SVRT for high-speed rendering, and has a host of other advanced video editing features.

PowerDVD 5 NE

PowerDVD 5 NE is software for playing back DVD-Video and video files.

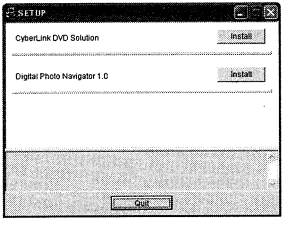
1 Load the provided CD-ROM into the PC.

After a moment, the [SETUP] screen appears.

- From the [SETUP] screen, you can install the desired driver or software.
- If the [SETUP] screen does not appear, double-click the CD-ROM icon in the [My Computer] window.

2 Click [Install] on the right side of the desired software and follow the on screen instructions to complete the installation.

The installation of the selected driver or software starts. The procedure differs depending on the driver or the software.



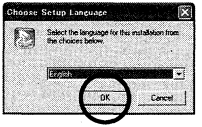
Following steps are the example of CyberLink DVD Solution.

3 Click [Install] on the right side of [CyberLink DVD Solution] on the [SETUP] screen.

[Choose Setup Language] screen appears.

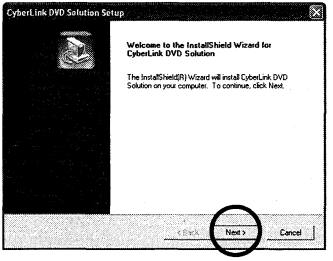
CONTINUED ON NEXT PAGE

4 Select the desired language and click [OK].



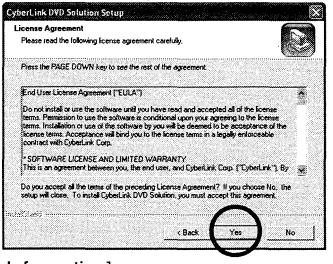
The [CyberLink DVD Solution Setup] screen in step **5** appears.

5 Click [Next].


CyberLink DVD Solution Setup
Welcome to the InstallShield Wizard for CyberLink DVD Solution
The InstallShield(R) Wizard will install CyberLink DVD Solution on your computer. To continue, click Next.
< Back
Next >
Cancel

[License Agreement] screen appears.

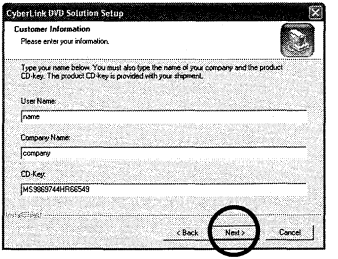
6 Click [Yes].


CyberLink DVD Solution Setup
License Agreement
Please read the following license agreement carefully.
Press the PAGE DOWN key to see the rest of the agreement.
End User License Agreement ("EULA")
Do not install or use the software until you have read and accepted all of the license terms. Permission to use the software is conditional upon your agreeing to the license terms. Installation or use of the software by you will be deemed to be acceptance of the license terms. Acceptance will bind you to the license terms in a legally enforceable contract with CyberLink Corp.
* SOFTWARE LICENSE AND LIMITED WARRANTY
This is an agreement between you, the end user, and CyberLink Corp. ("CyberLink"). By
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install CyberLink DVD Solution, you must accept this agreement.
InstallShield
< Back
Yes
No

[Customer Information] screen appears.

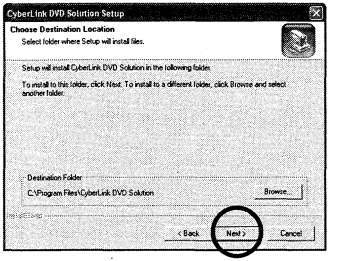
7 Confirm your information and click [Next].

- It is possible to change the information.



[Choose Destination Location] screen appears.

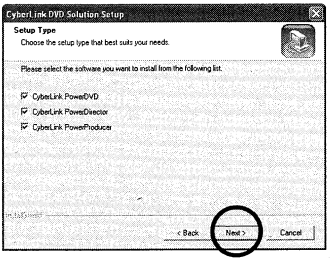
8 Click [Next].


CyberLink DVD Solution Setup
Choose Destination Location
Select folder where Setup will install files.
Setup will install CyberLink DVD Solution in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\CyberLink DVD Solution
Browse...
InstallShield
< Back
Next >
Cancel

[Setup Type] screen appears.

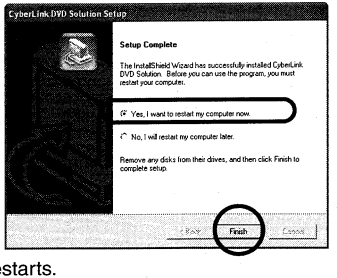
CONTINUED ON NEXT PAGE

9 Select the program(s) you want to install, then click [Next].



[Setup Status] screen appears. Wait for a moment until the installation is finished. When the installation is finished, [Readme] appears. Confirm the contents and click the close button on the upper right of the window to close it. Then [Setup Complete] screen appears.

10 Click [Finish].


CyberLink DVD Solution Setup
Setup Complete
The InstallShield Wizard has successfully installed CyberLink DVD Solution. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish
Cancel

The PC restarts.

Install all of the desired software in the same way.
To display [SETUP] screen, double-click the CD-ROM icon in the [My Computer] window.

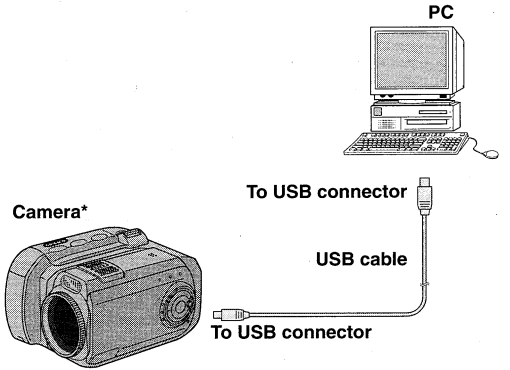
NOTES:

- The software instruction manual is included on the CD-ROM in PDF format. Note that Adobe® Acrobat® Reader™ or Adobe® Reader® must be installed to read PDF files.
  Digital Photo Navigator:
  Double-click the [Docs] folder, then the [PhotoNavi] folder. Open "start.pdf" and select the desired language.
  CyberLink DVD Solution:
  Double-click the [Docs] folder, then the [CyberLink] folder. Open "start.pdf" and select the desired language. A brief procedure is presented for using CyberLink DVD Solution to edit video files that were shot with the camera and create a DVD-Video, transfer the edited videos to the camera, and then play back the videos in the camera.
- Adobe® Reader® can be loaded from Adobe's web site: http://www.adobe.com/
- If you perform installation of a software that is already installed, uninstallation will start. In this case, perform the installation again after uninstallation is finished.
- DirectX is necessary so that CyberLink DVD Solution works properly.

Connections

Connecting the USB cable

Connect the USB cable to copy still image, video files and voice files in a recording medium to the PC.



* The camera illustration appearing above is of the GZ-MC200.

1 To assure safety, make sure all units are turned off before making any connections.

2 Use the USB cable to connect the camera to the PC.

NOTES:

- **It is recommended to use the AC Adapter as the power supply instead of the battery pack.**
- When the USB cable is connected, turning on or off the camera causes malfunctions of the PC.
- If you connect the camera to the PC through a USB hub, compatibility issues between the hub and the PC may result in instability in the operation of the PC. If this happens, connect the camera directly to the PC, not through the hub.
- Do not use an extension USB cable.

Viewing the Contents of a Recording Medium

1 Make sure that there is a recording medium in the camera.

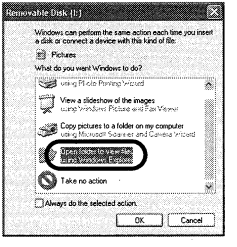
2 Set the camera's power switch to the playback mode while pressing down the lock button located on the switch.
The camera turns on.

3 Select the playback mode (video mode, still image mode or voice mode).

4 Select the slot in which the recording medium is inserted.

5 Connect the camera to the PC with a USB cable. (☞ pg. 10)
On the camera's LCD monitor [USB MODE] appears.

6 When using Windows® XP:
The [Removable Disk] window appears on the PC's screen after a moment.
Select [Open folders to view files using Windows Explorer] and click [OK].


Removable Disk (I:)
Windows can perform the same action each time you insert a disk or connect a device with this kind of file.
Pictures
What do you want Windows to do?
View a slideshow of the images
Copy pictures to a folder on my computer
Open folder to view files using Windows Explorer
Take no action
Always do the selected action.
OK
Cancel

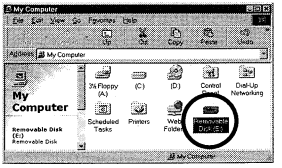
NOTE:

If the [Removable Disk] window does not appear, confirm the connection (☞ pg. 10) or perform the steps 1 and 2 (☞ pg. 11).

CONTINUED ON NEXT PAGE

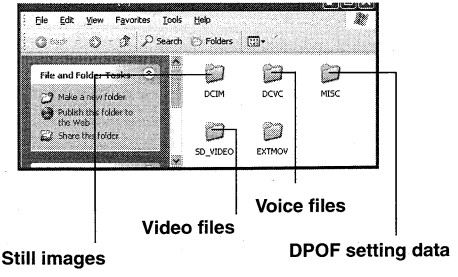
When using Windows® Me/2000:

1 Double-click the [My Computer] icon on the desktop. The [Removable Disk] icon which represents the recording medium in the camera appears in the [My Computer] window.



2 Double-click the [Removable Disk] icon.

7 The folders in the recording medium appear.
Different file types are stored in different folders.



[DCIM]: Contains folders with still images (extension ".jpg")
[DCVC]: Contains folders with voice files (extension ".wav")
[SD_VIDEO]: Contains folders with video files (extension ".mod")
[MISC]: Contains folders with DPOF setting data

NOTES:

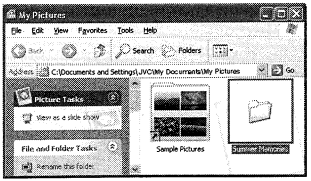
- Saving the wrong kinds of files in a recording medium or deleting files or folders from a recording medium can cause problems with the operation of the camera. When it is necessary to delete a file from a recording medium, delete it through the camera.
- Never disconnect the USB cable while the message [ACCESSING FILES] is displayed on the camera's LCD monitor.
- If you are using a brand new recording medium, you need to format the recording medium with the camera first. You may not be able to copy files from the recording medium to the PC without doing so.
- The file extension may not appear depending on the setting.

Copying Files to the PC

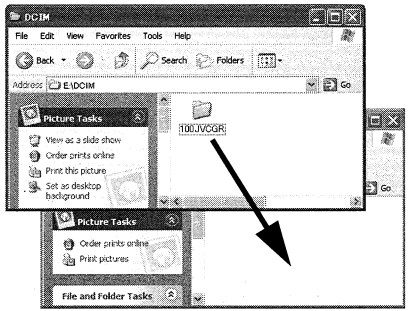
Still image, video files and voice files that are stored in a recording medium can be copied to the PC and played back on the PC.

1 Perform the procedure in "Viewing the Contents of a Recording Medium" (☞ pg. 10).
The folders in the recording medium appear.

2 Create a new folder, enter the folder name, and then double-click it.
For example, create a new folder in the [My Pictures] folder.



3 Select the folder to be copied, and then drag and drop that folder in the destination folder.



To copy still images: Copy the folder within the [DCIM] folder.
To copy video files: Copy the folder within the [SD_VIDEO] folder.
To copy voice files: Copy the folder within the [DCVC] folder.

- The message [ACCESSING FILES] appears on the LCD monitor of the camera, and the folder is copied from the recording medium to the PC.

NOTE:
Never disconnect the USB cable while the message [ACCESSING FILES] is displayed on the camera's LCD monitor.

Playing Back Files on the PC

Still images

Use an application that can handle the JPEG file format.
To view a still image, double-click the still image file (extension ".jpg").

Video files

Use the PowerDVD 5 NE.
You can install this software from the provided CD-ROM.
For more details of PowerDVD 5 NE, refer to the software instruction manual in the CD-ROM. (☞ pg. 15)

Voice files

Use the Windows Media™ Player (version 6.4 or later).
You can download the Windows Media™ Player from the Microsoft web site at:
http://www.microsoft.com/

Disconnecting the USB cable

Before loading or unloading recording mediums or turning off the PC, first disconnect the USB cable and turn off the camera.

1 Confirm that the message [ACCESSING FILES] is not currently displayed on the LCD monitor of the camera.

- If the message [ACCESSING FILES] is currently displayed, wait until it disappears before proceeding.

2 Double-click the [Safely Remove Hardware] or [Unplug or Eject Hardware] icon in the status bar.

The [Safely Remove Hardware] or [Unplug or Eject Hardware] dialog box appears.
Windows® XP: If not, wait a while then go to step **5**.

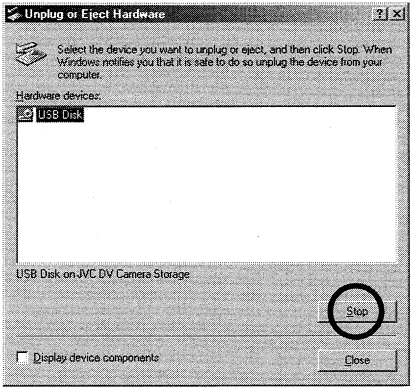
3 Select [USB Mass Storage Device] or [USB Disk], and then click [Stop].

- **Windows® 2000/XP**

Safely Remove Hardware
Select the device you want to unplug or eject, and then click Stop. When Windows notifies you that it is safe to do so unplug the device from your computer.
Hardware devices:
USB Mass Storage Device
USB Mass Storage Device at GR-DX/7
Properties
Stop
Display device components
Close

CONTINUED ON NEXT PAGE

● **Windows® Me**

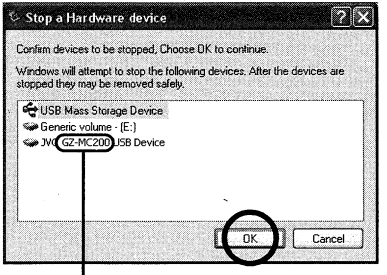

Unplug or Eject Hardware
Select the device you want to unplug or eject, and then click Stop. When Windows notifies you that it is safe to do so unplug the device from your computer.
Hardware devices:
USB Disk
USB Disk on JVC DV Camera Storage
Stop
Display device components
Close

The [Stop a Hardware device] dialog box appears.

4 Click [OK].

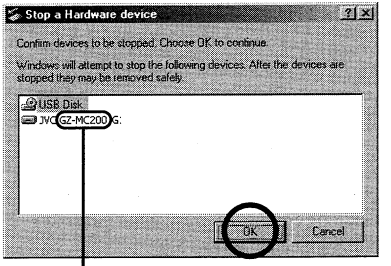
Windows® 2000/Me: If a message indicating that the device can be safely removed appears, click [OK] and then click [Close].

● **Windows® 2000/XP**


Stop a Hardware device
Confirm devices to be stopped, Choose OK to continue.
Windows will attempt to stop the following devices. After the devices are stopped they may be removed safely.
USB Mass Storage Device
Generic volume - (E:)
JVC GZ-MC200 USB Device
OK
Cancel

* The model name depends on the connected camera.

● **Windows® Me**


Stop a Hardware device
Confirm devices to be stopped. Choose OK to continue.
Windows will attempt to stop the following devices. After the devices are stopped they may be removed safely.
USB Disk
JVC GZ-MC200 G:
OK
Cancel

* The model name depends on the connected camera.

5 Disconnect the USB cable.

6 Set the camera's power switch to off.

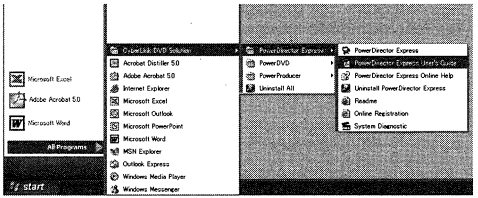
The camera turns off.

User's Guide/Help/Readme

This manual only refers to software installation and PC connection. For more details of each software, refer to its user's guide/help/Readme.

Following steps are the example of CyberLink PowerDirectorExpress NE.

1 Click [Start], go to [All Programs] – [CyberLink PowerDirectorExpress], and then click User's Guide/ Help/Readme depending on your preference.



INFORMATION

The programs in CyberLink DVD Solution are versions with limited functionality. The User's Guide and Help files are written for the commercial version available in stores. For information about the differences with the commercial version, see the Readme file for the respective program.

JVC

Read this first!
– How to handle the Digital Media Camera –

ENGLISH

Please read this together with the instruction manual before using the camera. The advanced operation manual is provided as HTML format in the provided CD-ROM. Refer to "For Advanced Operations" page 32 of the instruction manual (printed edition).

■ Make a backup of important recorded data

Protect your important recorded data by copying the files to PC. It is recommended to copy it from your PC to a DVD or other recording media for storage. Refer to "Connections" on page 10 of "SOFTWARE INSTALLATION AND USB CONNECTION GUIDE".

■ Make a trial run before recording important data

Play back the recorded data to check that the video and sound have been recorded correctly. Refer to "BASIC OPERATIONS" on page 19 – 25 of the instruction manual (printed edition).

■ Reset the camera if it does not operate correctly

This camera uses a microcomputer. Factors such as background noise and interference can prevent it from operating correctly. If the camera does not operate correctly, press and hold **MENU** and **MODE** simultaneously for approx. 5 seconds to reset the camera. If the problem still exists, set the power switch to [OFF] and remove the power supply (battery pack or AC adapter) from the camera, then put it back again.

■ Check the compatible recording media

The following recording media have been guaranteed to work with this camera. Others are not guaranteed to work, so buy such products with caution.

Removable hard disks: Microdrive® from Hitachi
CompactFlash cards: By LEXAR, SanDisk and Hagiwara Sys-com
SD memory cards: By Panasonic, Toshiba and SanDisk

- If other media are used, they may fail to record data correctly, or they may lose data that has already been recorded.
- Microdrive® of 1GB or below are not supported.
- MultiMediaCards are not supported.
- For video recording and continuous shooting of still images, use a removable hard disk, high-speed CompactFlash card (at least 40x speed) or SD memory card (at least 10 MB/s).

■ Format recording medium before using

Before using this camera, use the Format function [FORMAT] in the menu to format the provided removable hard disk. Also, be sure to format newly-purchased CF cards (removable hard disk/CompactFlash card) and SD cards with this camera before using them. This enables stable speeds and operation when accessing the recording medium.

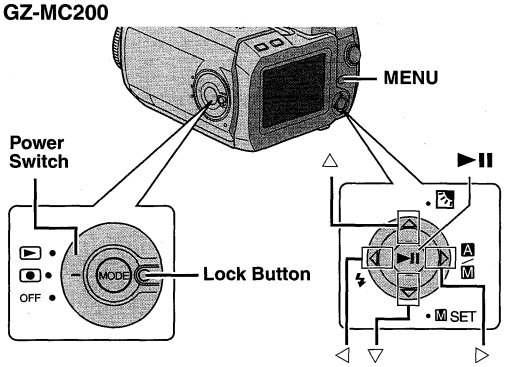
To format

(1) Set the power switch to ⦿ while pressing down the lock button located on the switch.
(2) Press **MENU**.
(3) Press △▽ to select [MEMORY CARD SETTING], then press ►II.
(4) Press △▽ to select [FORMAT], then press ►II.
(5) Press △▽ to select [CF SLOT] or [SD SLOT], then press ►II.

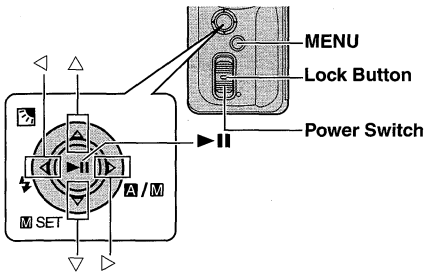
- [CF SLOT]: Removable hard disk or CompactFlash card
- [SD SLOT]: SD memory card

(6) Press △▽ to select [EXECUTE], then press ►II.

GZ-MC200



GZ-MC100



■ Take care to hold the camera correctly during recording

Do not cover the area near the lens, stereo microphone, camera sensor, flash, or flash sensor with your finger or any object while recording. Refer to "Index" on page 6 – 7 of the instruction manual (printed edition).

■ Bring your camera together with the removable hard disk

When requesting repairs for breakdowns by your dealer or JVC service center, be sure to bring your camera together with the removable hard disk. If one of them is not included, the cause cannot be diagnosed, and the repair cannot be made properly.

Preparations

■ Storage destination for video, still images and voice files
The initial default setting is to record all video, still image and voice files to CF card. To record them to SD card, change [VIDEO MODE], [IMAGE MODE], [VOICE MODE] under [MEMORY CARD SETTING] to [SD SLOT]. Refer to "Selecting Recording Medium" on page 17 of the instruction manual (printed edition).

Power supply

■ When the CF card cover (GZ-MC200) or the rear panel (GZ-MC100) is opened or the SD card is removed while the power is on
To protect the data in the recording medium, the power is automatically turned off. Use the power switch to turn on the power again.
■ When a certain length of time passes without operation

- When using the battery, the power is turned off automatically to conserve power. Use the power switch to turn on the power again.
- When using the AC adapter, the access lamp lights up, and the LCD turns off (the camera enters the sleep mode). Operation is restored once any operation is made.

Recording

■ Switching to manual mode
Switch to manual mode when you want to adjust the focus manually or add video effects etc. when recording. Press and hold ▷ (A/M) so that M is displayed at the top left of the screen.
■ Continuous shooting speed of still images
The continuous shooting speed will drop when repeatedly making continuous shots, when using certain recording medium, or under certain recording conditions. Refer to "Continuous Shooting" on page 22 of the instruction manual (printed edition).
■ When [RECORDING FAILURE] appears

- Performance of recording medium is poor.

→ Use the Cleanup function [CLEAN UP] in the menu.

- The writing speed of recording medium is slow, or the recording medium is corrupted.

→ Use the recording medium to which the operation is guaranteed. Refer to "Check the compatible recording media" on the left column.

- The recording medium was subjected to vibrations or jolts.

→ Be careful not to subject the recording medium to vibrations or jolts.

Playback

■ Date and time indicator during video playback
The date and time are not displayed during video playback. The recording start date and time can be checked in the file information by pressing **INFO** when video is paused.
■ To turn off the display indications during video and still image playback
Press **INFO** to change the display indications.

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■ To select the file for playback on the index display:
(1) Video files: Slide the zoom lever to [W] while playback is paused.
Still image files: Slide the zoom lever to [W] when a recorded image is displayed.
Voice file: Slide the zoom lever to [W] while playback is paused.
(2) Press △▽◁ ▷ to select the desired file.
(3) Press ►II to start playback.

■ If the surface of the hard disk is damaged
Any damage or other defect on the hard disk surface makes it difficult to read data. This camera will make all possible efforts to read data, but the same image may be displayed for a long time during video playback, or motion may be choppy. There may be periods of silence during voice playback. When such a state continues for some time, and further playback is impossible, it will stop automatically.

■ At splice points between scenes in video playback:
The image may freeze momentarily, and sound may be interrupted, but that does not indicate a malfunction.

Miscellaneous points

■ If the recording medium contains a large number of still images (approximately 1,000 or more)
Processing may take a long time after the power is switched on or the mode is changed, if there is a large number of still images (approximately 1,000 or more) stored in the recording medium. Copy the stored files to a PC, and delete them from the recording medium.

■ When [VIDEO MANAGEMENT FILE IS BROKEN] appears
Press △▽ to select [YES], then press ►II to recover the video management file. If the desired video file is not displayed on the video index screen in spite of the file recovery, the file is moved to the [EXTMOV] folder. Press the recording start/stop button in the index screen to display [MPG], and then select the desired file. (Refer to "– Software Installation And USB Connection Guide Supplement –" below for the [EXTMOV] folder.)

■ Direct printing with a PictBridge printer
After selecting [DIRECT PRINT] in the menu, connect the USB cable. If the printer is not recognized, or to print again after direct printing with a PictBridge Printer, remove the USB cable, select [DIRECT PRINT] in the menu again, and then reconnect the cable.

■ DPOF index screen
- While a still image is selected and the zoom lever is pushed to [T] side, the preview of the selected still image is displayed.
- If [CHECK SETTINGS] is selected to confirm the DPOF setting, it is not possible to cancel the setting by pressing 🗑 on the index screen. To cancel the setting, set the number of prints to "0".

■ Video file names
Video file names are assigned as sequential hexadecimal numbers.

NOTE:
For the index display, manual focus, video effects, format, cleanup, direct printing and DPOF, refer to the advanced operation manual provided as HTML format in the CD-ROM. See page 32 of the instruction manual (printed edition) for details.

Read this first!
– Software Installation And USB Connection Guide Supplement –

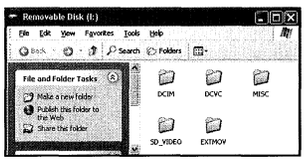
ENGLISH

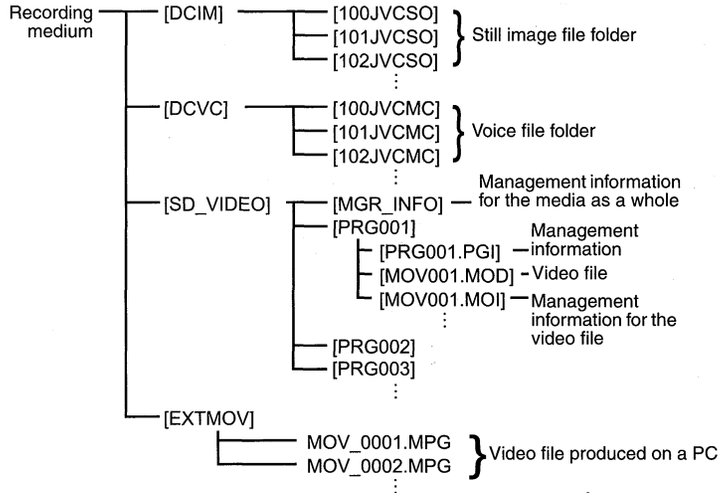
Please read this together with the instruction manual before using the software.

■ When playing back a file in the recording medium on your PC
Copy the file to your PC, and then play it back. If video file is played back directly from recording medium (i.e. the camera is connected through USB to your PC), it may be not played back properly due to the inadequate processing speeds or other problems. Also use the provided PowerDVD 5 NE software to play back video files.

■ When copying the file in the recording medium to your PC
File transfer takes considerable time in PCs using USB 1.1. Usage of a PC that supports USB 2.0 is recommended.

■ Folder structure within the recording medium
Video files: Stored in the [PRGxxx] folder (where xxx is a number), within the [SD_VIDEO] folder.
Still image files: Stored in the [xxxJVCSO] folder (where xxx is a number), within the [DCIM] folder.
Voice files: Stored in the [xxxJVCMC] folder (where xxx is a number), within the [DCVC] folder.





Management information: Information such as the date and time of recording, recorded with the video file.

NOTES:
- Any folders or files other than those described above are recorded in the recording medium.
- Do not delete, move or rename folders and files within the medium on PC.

■ File types and extensions
Video files: MPEG2 files, extension is ".mod"
Still image files: JPEG files, extension is ".jpg"
Voice files: WAVE files, extension is ".wav"

■ How to copy video files from the PC
To use the camera to play back video files (MPEG2 files, with the extension ".mpg") which have been edited using the provided software, change the file name to "MOV_xxxx.mpg" (where xxxx is a number) and move it to the [EXTMOV] folder.
The following video files cannot be played back on the camera:
- Files which do not have correct file names
- Files which are not in MPEG2 format
- Files prepared on any application other than the provided software
- Edited files which were not produced on a JVC Digital Media Camera

Also, be sure to turn off the SVRT function when editing the video files using PowerDirector Express NE. (Do not check the checkbox [Use SVRT to save rendering time].)

■ How to play back video files from the [EXTMOV] folder
On the index display of video files, press the recording start/stop button to display "MPG" on the screen. After that, follow the usual operation for playback. However, the forward/reverse skip search, frame-by-frame playback and playlist functions are not available.

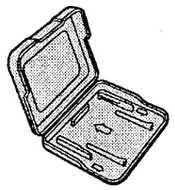
■ Even if PowerDirector/PowerProducer/PowerDVD have already been installed on the PC
Video files captured with this camera can only be handled on the provided software. Please install and use the provided software (PowerDirector Express NE, Power Producer 2 Gold NE, PowerDVD 5 NE). If PowerDirector/PowerProducer/PowerDVD have already been installed, uninstall them before installing the provided software.

■ CyberLink Technical Support
For details of CyberLink technical support, refer to the following website:
http://www2.cli.co.jp/products/ne/

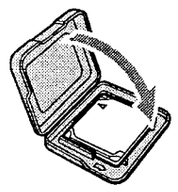
After reading this sheet, store it together with the instruction manual, and refer to it when necessary.

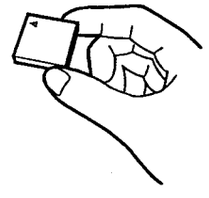
LYT1332-005A
1004HOH-AL-VP

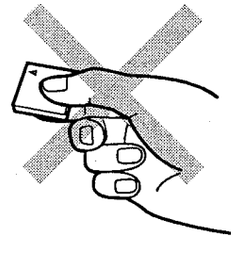
JVC



Slide
Schieben
Faire coulisser
Schuiven
Deslizar
Far scorrere
Skub
Empurre
Työnnä
Skjut







ENGLISH

Read Before Usage —Operation of the Removable Hard Disk—

Do not subject the disk to sudden jolts or excessive pressure.
- This could cause a breakdown.
- Be especially careful to avoid sudden jolts when shooting or during playback.
- After removing the disk from the camera, store it by inserting into the supplied protective case.
- Do not apply strong pressure from the outside such as by grasping it strongly on the label side or writing on the label side.

Cautions for temperature
- The camera's protection circuit may work for the proper recording or playback when the camera internal temperature is too high or too low. When this happens, recording and playback may be disabled.
- The camera and removable hard disk can heat up when used for an extended period. However, this is not a malfunction.
- Be careful when removing the removable hard disk from the camera. Do not remove the disk from the camera immediately after shooting or playback.

NOTE:
Refer to the section "Removable Hard Disk" on page 5 of the instruction manual (printed edition).

DEUTSCH

Vor Gebrauch lesen — Betrieb der herausnehmbaren Festplatte —

Setzen Sie die Festplatte keinen plötzlichen Stößen oder großem Druck aus.
- Dies könnte zu einem Ausfall führen.
- Achten Sie besonders während Aufnahme und Wiedergabe darauf, Stöße zu vermeiden.
- Nachdem Sie die Festplatte aus der Kamera entnommen haben, bewahren Sie sie in der mitgelieferten Schutzhülle auf.
- Üben Sie keinen starken Druck von außen aus, wie zum Beispiel durch Drücken oder Schreiben auf die Etikettenseite.

Hinweise zur Betriebstemperatur
- Die Schutzschaltung der Kamera sichert zu einem großen Teil Aufnahme und Wiedergabe bei zu hohen oder zu niedrigen Temperaturen innerhalb der Kamera. In diesem Fall können Aufnahme und Wiedergabe auch deaktiviert werden.
- Bei ausgiebigem Gebrauch können sich Kamera und herausnehmbare Festplatte erhitzen. Dies ist jedoch keine Fehlfunktion.
- Seien Sie vorsichtig, wenn Sie die herausnehmbare Festplatte aus der Kamera entfernen. Entnehmen Sie den Datenträger nicht sofort nach Aufnahme oder Wiedergabe aus der Kamera.

HINWEIS:
Siehe Abschnitt "Herausnehmbare Festplatte" auf Seite 5 des Bedienungshandbuchs (Druckausgabe).

FRANÇAIS

À lire avant utilisation — Utilisation du disque dur amovible —

Ne pas soumettre le disque à des mouvements saccadés ou à une pression excessive.
- Cela pourrait provoquer une panne.
- Faire particulièrement attention à éviter les mouvements brusques pendant la prise de vue et la lecture.
- Une fois le disque retiré de l'appareil photo, le ranger en l'insérant dans son boîtier de protection fourni.
- Ne pas appliquer une pression importante depuis l'extérieur comme ce qui pourrait être le cas si vous le saisissez fermement par le côté qui porte l'étiquette ou si vous écrivez sur celle-ci.

Mises en garde pour la température
- Le circuit de protection de l'appareil photo peut s'activer pour une lecture ou un enregistrement corrects lorsque la température interne de l'appareil photo est trop élevée ou trop basse. Dans ce cas, l'enregistrement et la lecture risquent d'être désactivés.
- L'appareil photo et le disque dur amovible risquent de chauffer s'ils sont utilisés pendant une période prolongée. Toutefois, il ne s'agit pas d'un mauvais fonctionnement.
- Faire attention avant de retirer le disque dur amovible de l'appareil photo. Ne pas retirer le disque de l'appareil photo immédiatement après une prise de vue ou une lecture.

REMARQUE :
Se reporter à la section « Disque dur amovible » à la page 5 du manuel d'utilisation (édition imprimée).

NEDERLANDS

Lezen voor gebruik —Werken met de verwijderbare harde schijf—

Stel de schijf niet bloot aan plotselinge schokken en duw er niet hard op.
- Hierdoor zou de schijf kapot kunnen gaan.
- Let er vooral goed op dat u plotselinge schokken vermijdt tijdens het maken of afspelen van opnamen.
- Berg de schijf op in de meegeleverde cassette als u hem los hebt genomen van de camera.
- Duw niet hard op de schijf, oefen bijvoorbeeld geen sterke druk uit op het label door erop te schrijven.

Let op de temperatuur
- Het beveiligingscircuit van de camera zal misschien in actie komen om een goede opname of weergave te waarborgen wanneer de temperatuur in de camera te hoog of te laag wordt. Wanneer dit gebeurt, kan het onmogelijk zijn opnamen te maken of af te spelen.
- De camera en de verwijderbare harde schijf kunnen warm worden wanneer zij gedurende een lange tijd worden gebruikt. Dit is echter geen storing.
- Ga voorzichtig te werk wanneer u de verwijderbare harde schijf losneemt van de camera. Neem de schijf niet onmiddellijk na het maken of afspelen van opnamen los van de camera.

OPMERKING:
Zie de paragraaf "Verwijderbare harde schijf" op pagina 5 van de instructiehandleiding (gedrukte versie).

ESPAÑOL/CASTELLANO

Leer antes de usar —Funcionamiento del disco duro extraíble—

Evite sacudir o ejercer una presión excesiva sobre el disco.
- Podría producirse una avería.
- Evite especialmente las sacudidas bruscas durante la filmación o la reproducción.
- Después de extraer el disco de la cámara, guárdelo en su funda protectora.
- No ejerza una presión excesiva cuando, por ejemplo, sujete el disco por el lado de la etiqueta o cuando escriba en la etiqueta.

Precauciones relacionadas con la temperatura
- Para garantizar una grabación o reproducción adecuadas, el circuito de protección de la cámara entrará en funcionamiento si la temperatura interna de la cámara es demasiado alta o baja. Cuando esto suceda, la grabación o reproducción pueden desactivarse.
- Tanto la cámara como el disco duro extraíble pueden calentarse si se utilizan de forma prolongada. Sin embargo, esto no es un fallo de funcionamiento.
- Retire el disco duro extraíble de la cámara con mucho cuidado. No extraiga el disco de la cámara inmediatamente después de filmar o reproducir.

NOTA:
Consulte la sección "Disco duro extraíble" en la página 5 del manual de instrucciones (edición impresa).

ITALIANO

Leggere prima dell'uso —Utilizzo dell'hard disk rimovibile—

Non sottporre il disco a scosse improvvise o pressione eccessiva.
- In caso contrario, potrebbe guastarsi.
- Prestare particolarmente attenzione a evitare le scosse improvvise durante le riprese o la riproduzione.
- Dopo aver rimosso il disco dalla Media camera, conservarlo inserendolo nella custodia protettiva in dotazione.
- Non applicare forte pressione dall'esterno, ad esempio afferrandolo con forza dal lato dell'etichetta o scrivendo sul lato dell'etichetta.

Precauzioni relative alla temperatura
- Il circuito di protezione della Media camera potrebbe entrare in funzione per una registrazione o una riproduzione corretta quando la temperatura interna della Media camera è troppo alta o troppo bassa. In questo caso, la registrazione e la riproduzione potrebbero venire disattivate.
- La Media camera e l'hard disk rimovibile possono riscaldarsi se utilizzati per periodi di tempo prolungati. Tuttavia, non si tratta di un guasto.
- Fare attenzione quando si rimuove l'hard disk dalla Media camera. Non rimuovere il disco dalla Media camera subito dopo aver effettuato la riprese o la riproduzione.

NOTA:
Consultare la sezione "Hard disk rimovibile" a pagina 5 del manuale d'uso (versione cartacea).

PORTUGUÊS

Ler antes da utilização —Funcionamento do disco rígido amovível—

Não submeta o disco a pressão excessiva ou estremeções súbitos.
- Se o fizer pode provocar uma avaria.
- Durante a filmagem ou reprodução evite os estremeções súbitos.
- Depois de retirar o disco da câmara, coloque-o na caixa de protecção fornecida para o efeito.
- Não faça pressão na parte exterior, por exemplo escrevendo ou agarrando no disco com força no lado da etiqueta.

Cuidados relativos à temperatura
- Se a temperatura interna da câmara for demasiado alta ou baixa, o circuito de protecção da câmara pode ser activado para garantir uma gravação ou reprodução correctas. Quando isto acontece, a gravação e a reprodução podem ser desactivadas.
- Se os utilizar durante muito tempo, a câmara e o disco amovível podem aquecer. No entanto, isto não é sinal de avaria.
- Tenha cuidado quando retirar o disco rígido amovível da câmara. Não retire o disco da câmara imediatamente depois de terminar a filmagem ou reprodução.

NOTA:
Consulte a secção "Disco rígido amovível" na página 5 do manual de instruções (edição impressa).

DANSK

Læs dette før brug —Betjening af den flytbare harddisk—

Udsæt ikke disken for pludselige stød eller kraftigt tryk.
- Dette kan medføre fejlfunktion.
- Sørg især for at undgå pludselige stød under indspilning eller afspilning.
- Når disken er taget ud af kameraet, skal den opbevares i den medfølgende beskyttelsesæske.
- Udsæt den ikke for kraftigt tryk udefra, f.eks. ved at tage for hårdt fat i etiketsiden eller skrive på etiketsiden.

Forsigtighedsregler vedrørende temperatur
- Kameraets beskyttelseskredsløb vil muligvis fungere til korrekt indspilning eller afspilning, når kameraets interne temperatur er for høj eller for lav. Når dette sker, kan der muligvis ikke udføres indspilning og afspilning.
- Kameraet og den flytbare harddisk kan blive varme, når de bruges i længere tid ad gangen. Dette er imidlertid normalt.
- Vær forsigtig, når den flytbare harddisk tages ud af kameraet. Tag ikke disken ud umiddelbart efter indspilning eller afspilning.

BEMÆRK:
Se i afsnittet "Flytbar harddisk" på 5 i brugsvejledningen (trykt udgave).

SUOMI

Lue ennen käyttöä —Siirrettävän kiintolevyn käyttö—

Älä altista levyä äkillisille täräyksille tai kovalle paineelle.
- Ne voivat vioittaa levyä.
- Varo erityisesti äkillisiä täräyksiä kuvauksen ja toiston aikana.
- Kun olet poistanut levyn kamerasta, säilytä sitä mukana toimitetussa suojakotelossa.
- Älä kohdista voimakasta painetta ulkopuolelta esimerkiksi tarttumalla lujasti nimiöpuolelta tai kirjoittamalla nimiöpuolelle.

Varoitukset lämpötilasta
- Kameran suojapiiri voi pyrkiä turvaamaan oikean nauhoituksen tai toiston, kun kameran sisäinen lämpötila on liian korkea tai matala. Kun näin käy, nauhoitus ja toisto voivat estyä.
- Kamera ja siirrettävä kiintolevy voivat kuumeta, kun niitä käytetään pitkän aikaa. Tämä ei kuitenkaan ole virhetoiminto.
- Ole varovainen poistaessasi siirrettävää kiintolevyä kamerasta. Älä poista levyä kamerasta välittömästi kuvauksen tai toiston jälkeen.

HUOM:
Katso käyttöohjeen (painetun version) kohta Siirrettävä kiintolevy sivulla 5.

SVENSKA

Läs detta före användning —Handhavande för den borttagbara hårddisken—

Utsätt inte disken för plötsliga stötar eller överdrivet tryck.
- Det kan orsaka ett haveri.
- Var extra försiktig så att du undviker plötsliga stötar vid fotografering eller under uppspelning.
- Efter att hårddisken tagits ur kameran förvarar du den i medföljande skyddsfodral.
- Utsätt den inte för hårt utvändigt tryck, t ex genom att hålla i den hårt på etikettens sida, eller genom att skriva på etiketten.

Varning för temperaturer
- Kamerans skyddskrets kan fungera för normal inspelning eller uppspelning då kamerans invändiga temperatur är för hög eller för låg. När detta händer kan in- och uppspelning avaktiveras.
- Kameran och den borttagbara hårddisken kan bli uppvärmda när de använts under en längre tid. Detta är dock inte något fel.
- Var försiktig när du plockar ut den borttagbara hårddisken ur kameran. Plocka inte ut hårddisken ur kameran direkt efter fotografering eller uppspelning.

ANMÄRKNING:
Referera till avsnittet "Borttagbar hårddisk" på sidan 5 i bruksanvisningen (tryckt version).

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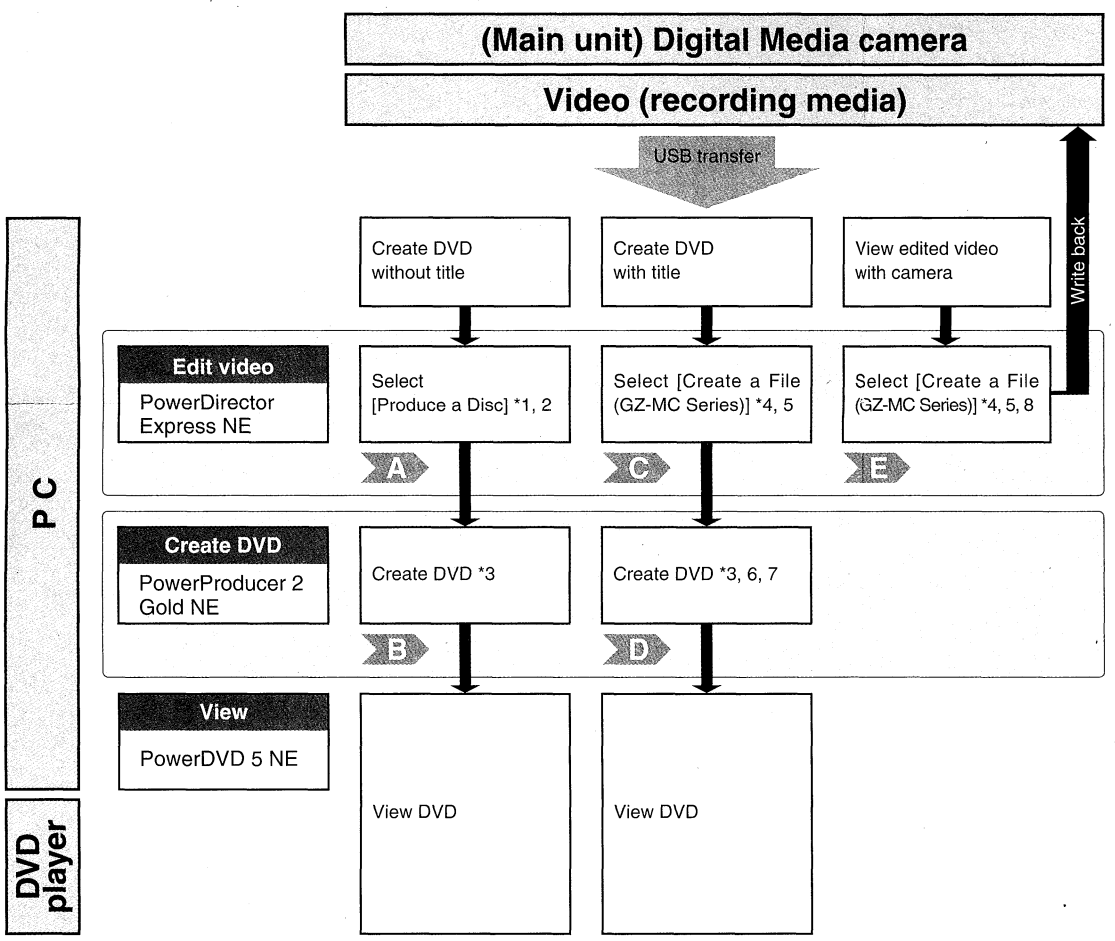
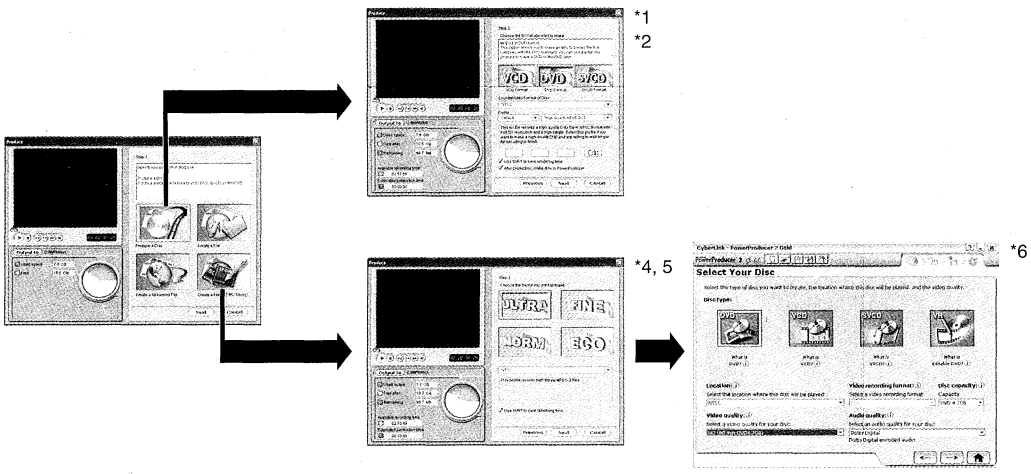
Creating DVDs and Writing Video Files Back to Camera

ENGLISH





*1 If the video is [ULTRA FINE], [FINE], or [NORMAL], select [High Quality NTSC (or PAL) DVD].
If the video is [ECONOMY], select [Long Play NTSC (or PAL) DVD].
Encoding is not performed on unedited video, and high-speed processing is performed at the original image quality.

*2 Insert a check mark for [Use SVRT to save rendering time].
The minimum required encoding is performed, and high-speed processing is performed while keeping the original image quality.
Insert a check mark for [After production, make disc in PowerProducer].
→ PowerProducer 2 Gold NE starts automatically.

*3 Before using PowerProducer 2 Gold NE, be sure to load a blank DVD media into the recordable DVD drive. Processing will stop if no blank DVD media is loaded.

*4 Select the same recording mode as the edited video. If you don't know the recording mode of video, select "ULTRA FINE".

*5 Insert a check mark for [Use SVRT to save rendering time].
The minimum required encoding is performed for the edited scenes, and high-speed processing is performed while keeping the original image quality.

*6 The correlation between the modes in PowerDirector Express NE and PowerProducer 2 Gold NE is shown below.
Usage in the mode corresponding to the video is recommended if possible.

[PowerDirector Express NE]	[PowerProducer 2 Gold NE]
ULTRA	HQ
FINE	XP
NORM	SP
ECO	EP

*7 To modify the menu, click the [Customize Menu] button of [Actions].

*8 A "defaultxx.mpg" file is created, and the title files are saved. Be sure to remember the file name and storage location. The video can be written back to the camera media.
To play back the created video file in the camera, copy the video file into the EXTMOV folder in the camera media, and then change the file names to the names below.

EXTMOV
- MOV_0001.mpg
- MOV_0002.mpg
- :
- MOV_9999.mpg

■ The video MOD file of the camera can be viewed using one of the methods below.

(1) Drag and drop the MOD file to the PowerDVD 5 NE icon.
(2) Start PowerDVD 5 NE, and then drag and drop the MOD file to the screen window.
(3) Start PowerDVD 5 NE, and then click [Select source] on the operation panel, select [Open media files] from the pull-down menu, and then add the MOD file that you want to play to the play list for playback.

A brief procedure is presented below for using CyberLink DVD Solution to edit video files that were shot with the camera and create a DVD-Video, transfer the edited videos to the camera, and then play back the videos in the camera.

A

(1) Copy the video files on the media to the PC.
(2) Start PowerDirector Express NE.
(3) Import the copied video files in the PowerDirector Express NE library.
(4) Drag and drop the videos from the library to the timeline/storyboard in the playback order.
(5) If necessary, edit the videos on the timeline/storyboard.
(6) Click the [Produce] button on the main panel to open the [Produce] screen.
(7) Select [Produce a Disc], and then click the [Next] button.
(8) Select the [DVD Format] and click [Next] button. *1,2
(9) Click the [Start] button to create the file.
(10) PowerProducer 2 Gold NE starts automatically.

B

(1) Load a blank DVD media into the recordable DVD drive. *3
(2) Click the [→] button in the [Import/Capture Content] screen of PowerProducer 2 Gold NE.
(3) Remove the check mark for [Include Menu] in the [Preview] screen, and then click the [→] button.
(4) Insert a check mark for [Burn to disc] in the [Final Output] screen, and then click the [Burn] button to create the DVD-Video.

C

(1) Copy the video files on the media to the PC.
(2) Start PowerDirector Express NE.
(3) Import the copied video files in the PowerDirector Express NE library.
(4) Drag and drop the video files that you want to edit from the library to the timeline/storyboard.
(5) Edit the videos on the timeline/storyboard.
(6) Click the [Produce] button on the main panel to move to the [Produce] screen.
(7) Click the [Create a File (GZ-MC Series)] and then click the [Next] button.
(8) Click the [Choose the format you want to make] in the [Produce] screen and click [Next] button. *4, 5
(9) Clicking [Start] button starts creation of the video file. After the completion of video creation, click the [Home] button.
(10) If there are other video files to edit, repeat steps (3) to (9).

D

(1) Load a blank DVD media into the recordable DVD drive. *3
(2) Start PowerProducer 2 Gold NE.
(3) Click the [Produce Movie Disc] button.
(4) Select the [DVD] button in the [Select Your Disc] screen to select the [Video quality], and then click the [→] button. *6
(5) Click the [Video files] button in the [Import/Capture Content] screen.
(6) Select the video file that you want to make into a DVD from the [Open] dialog box, and then click the [Open] button.
(7) Place the imported thumbnails into the desired playback order on the storyboard, and then click the [→] button.
(8) In the [Preview] screen, insert a check mark for [Include Menu] , and then click the [→] button on the screen. *7
(9) Insert a check mark for [Burn to disc] in the [Final Output] screen, and then click the [Burn] button to create the DVD-Video.

E

(1) Copy the video files on the media to the PC.
(2) Start PowerDirector Express NE.
(3) Import the copied video files in the PowerDirector Express NE library.
(4) Drag and drop the videos that you want to edit from the library to the timeline/storyboard.
(5) Edit the videos on the timeline/storyboard.
(6) Click the [Produce] button on the main panel to move to the [Produce] screen.
(7) Click the [Create a File (GZ-MC Series)] and then click the [Next] button.
(8) Click the [Choose the format you want to make] in the [Produce] screen and click [Next] button. *4, 5
(9) Clicking [Start] button starts creation of the video file. After the completion of video creation, click the [Home] button.
(10) If there are other video files to edit, repeat steps (3) to (9).
(11) Copy the created video file to the camera, and change the name of file. *8

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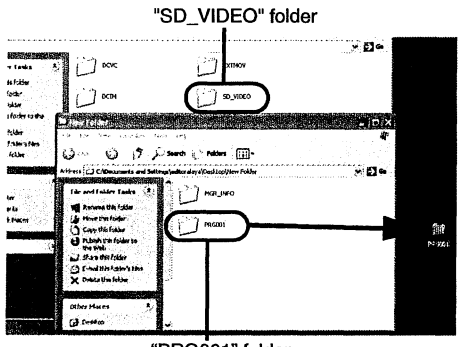
How To Create DVDs simply

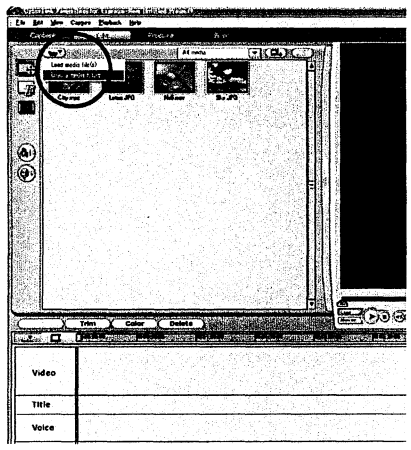
ENGLISH

1 Install CyberLink DVD Solution. For details, Refer to "SOFTWARE INSTALLATION AND USB CONNECTION GUIDE".

2 Connect the camera to the PC with the USB cable, or remove the removable hard disk from the camera and connect it to the PC using the card reader. Copy the video file folder (ex. "PRG001") in the recording medium to the PC.



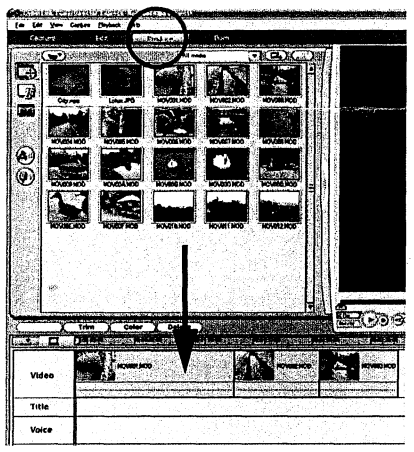
3 Start PowerDirector Express NE and click [Folder] of the import button, then select the folder copied to PC in step **2** to register it to the library.



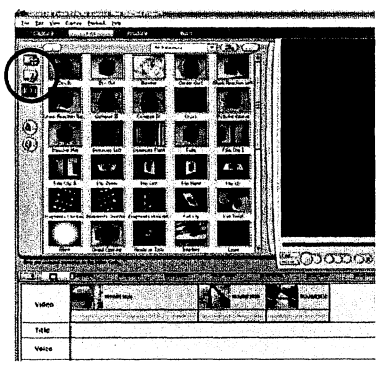
4 Drag and drop the videos from the library to the timeline/storyboard in the playback order.

If necessary, edit transition or title on the timeline/storyboard.

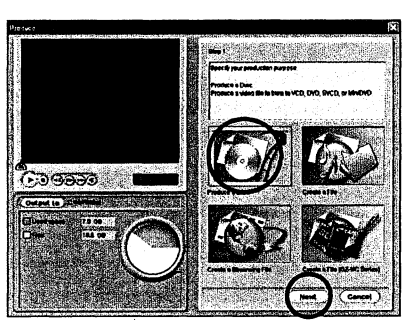
Click [Produce] button after finish editing.



(Example of transition)

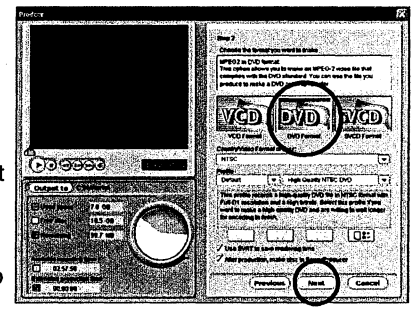


5 Select [Produce a Disc], and then click the [Next] button.



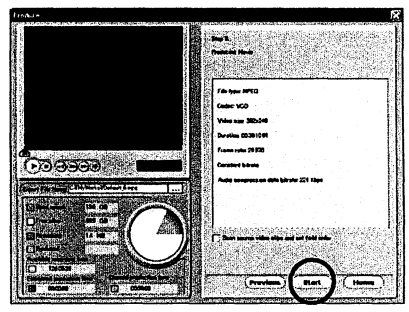
6 Select the [DVD Format] and click [Next] button.

- If the video is [ULTRA FINE], [FINE], or [NORMAL], select [High Quality NTSC (or PAL) DVD]. If the video is [ECONOMY], select [Long Play NTSC (or PAL) DVD]. Encoding is not performed on unedited video, and high-speed processing is performed at the original image quality.
- Insert a check mark for [Use SVRT to save rendering time]. The minimum required encoding is performed, and high-speed processing is performed while keeping the original image quality. Insert a check mark for [After production, make disc inPowerProducer].

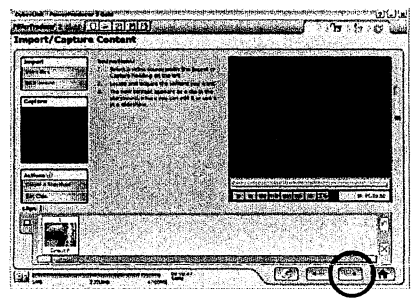


7 Click the [Start] button to create the file. PowerProducer 2 Gold NE starts automatically.

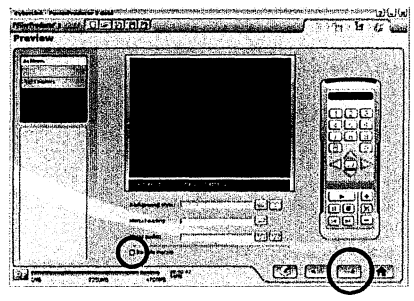
8 Load a blank DVD media into the recordable DVD drive.



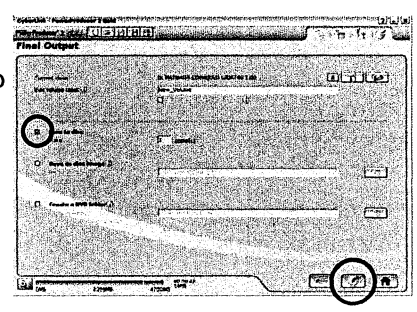
9 Click the [→] button in the [Import/Capture Content] screen of PowerProducer 2 Gold NE.



10 Remove the check mark for [Include Menu] in the [Preview] screen, and then click the [→] button.



11 Insert a check mark for [Burn to disc] in the [Final Output] screen, and then click the [Burn] button to create the DVD-Video.



For "Create DVD without title" and "Create DVD with title", refer to the instruction sheet "Creating DVDs and Writing Video Files Back to Camera".
For more details for creating a DVDs, refer to the user's guide of PowerDirector and PowerProducer installed on the PC. (Refer to the page 16 of "SOFTWARE INSTALLATION AND USB CONNECTION GUIDE".

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Fold so opening is at the top.
Tape in middle or on front.

Please do not send products or other correspondence to this address.

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Model Number _____

Serial Number _____

Purchase Price _____

Dealer _____

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- A replacement for a similar JVC product?
- A replacement for a similar product made by another company?
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- Other

4) How did you learn about this product?
- Magazine Advertisement
- Newspaper Advertisement
- TV/Radio Announcement
- Product Brochure
- Direct Mail
- Mail Order Catalog
- Friend/Relative Recommendations
- Salesperson/Store Recommendation
- Internet
- Dealer Event
- Other

5) Your Gender:
- Male
- Female

6) Your Marital Status
- Married
- Single

7) What is your approximate annual household income level?
- Under $25,000
- $25,000 – $49,000
- $50,000 – $74,000
- $75,000 – $99,000
- $100,000 and over

Comments:

_____

_____

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_____

_____

JVC Thanks you for completing this questionnaire.
Your responses will help us reach you with offers that may interest you.
If you prefer not to receive these offers please check here { }

BT-51034-2
(0204)

Printed in Japan

TO OUR VALUED CUSTOMER

THANK YOU FOR PURCHASING THIS JVC PRODUCT.

WE WANT TO HELP YOU ACHIEVE A PERFECT EXPERIENCE.

NEED HELP ON HOW TO HOOK UP?
NEED ASSISTANCE ON HOW TO OPERATE?
NEED TO LOCATE A JVC SERVICE CENTER?
LIKE TO PURCHASE ACCESSORIES?

JVC® IS HERE TO HELP!

TOLL FREE: 1(800)252-5722

http://www.jvc.com

Remember to retain your Bill of Sale for Warranty Service.

Do not attempt to service the product yourself

Caution

To prevent electrical shock, do not open the cabinet.
There are no user serviceable parts inside.
Please refer to qualified service personnel for repairs.

BT-51005-9
(0904)

PRINTED IN JAPAN

JVC®

LIMITED WARRANTY

USA ONLY

ONLY FOR PRODUCT PURCHASED IN U.S.A.

CONSUMER VIDEO 1-90

JVC COMPANY OF AMERICA (JVC) warrants this product and all parts thereof, except as set forth below ONLY TO THE ORIGINAL RETAIL PURCHASER to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from the date of original purchase for the period shown below. ("The Warranty Period")

PARTS	LABOR
1 YR	**90 DAYS**

THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY (50) UNITED STATES, THE DISTRICT OF COLUMBIA AND IN THE COMMONWEALTH OF PUERTO RICO.

WHAT WE WILL DO:

If this product is found to be defective within the warranty period, JVC will repair or replace defective parts with new or rebuilt equivalents at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during normal business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of the Warranty Period. All products may be brought to a JVC authorized service center on a carry-in basis. Color televisions with a screen size of 27" or greater qualify for in-home service. In such cases, a technician will come to your home and either repair the TV there or remove and return it if it cannot be repaired in your home.

WHAT YOU MUST DO FOR WARRANTY SERVICE:

Please do not return your product to the retailer

Instead, return your product to the JVC authorized service center nearest you. If shipping the product to the service center, please be sure to package it carefully, preferably in the original packaging, and include a brief description of the problem(s). Please call 1-800-252-5722 to locate the nearest JVC authorized service center. Service locations can also be obtained from our website http://www.jvc.com. If your product qualifies for in-home service, the service representative will require clear access to the product.

If you have any questions concerning your JVC Product, please contact our Customer Relations Department at 800-252-5722

WHAT IS NOT COVERED:

This limited warranty provided by JVC does not cover:

1. Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by JVC to render such service, or if affixed to any attachment not provided with the products, or if the model or serial number has been altered, tampered with, defaced or removed;
2. Initial installation, installation and removal from cabinets or mounting systems.
3. Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;
4. Damage that occurs in shipment, due to act of God, and cosmetic damage;
5. Signal reception problems and failures due to line power surge;
6. User Removal Memory Devices/Video Pick-up Tubes/CCD Image Sensors are covered for 90days from the date of purchase;
7. Accessories;
8. Batteries (except that Rechargeable Batteries are covered for 90 days from the date of purchase);
9. Products used for commercial purposes, including, but not limited to rental.
10. Loss of data resultant from malfunction of hard drive or other data storage device.

There are no express warranties except as listed above.

THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN.

JVC SHALL NOT BE LIABLE FOR ANY LOSS OF USE OF THE PRODUCT, INCONVIENCE, OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTAL (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion of incidental or consequential damages or limitations on how long an implied warranty lasts, so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

JVC COMPANY OF AMERICA
DIVISION OF JVC AMERICAS CORP.
1700 Valley Road
Wayne, NJ 07470
http://www.jvc.com

REFURBISHED PRODUCTS CARRY A SEPARATE WARRANTY, THIS WARRANTY DOES NOT APPLY. FOR DETAIL OF REFURBISHED PRODUCT WARRANTY, PLEASE REFER TO THE REFURBISHED PRODUCT WARRANTY INFORMATION PACKAGED WITH EACH REFURBISHED PRODUCT.

For customer use:

Enter below the Model No. and Serial No. which is located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No. : _____ Serial No. : _____

Purchase date : _____ Name of dealer : _____